Architecture in Dialogue with an Activated Ground

Unreasonable Creatures

Urs Bette

UCLPRESS

Architecture in Dialogue with an Activated Ground

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DESIGN RESEARCH IN ARCHITECTURE

Series Editors:

Murray Fraser and Jonathan Hill,
The Bartlett School of Architecture, UCL

Since the Renaissance a number of architect-scholars have created methods of intellectual scrutiny of architectural design that rely upon the interplay of drawings, models, textual analysis, intellectual ideas and cultural insights. Yet there is still no cohesive framework or outlet for design research in architecture. This innovative book series – still the only one of its kind – showcases the very best proponents of architectural design research from around the globe, drawing on a range of exemplar positions between practice and academia.

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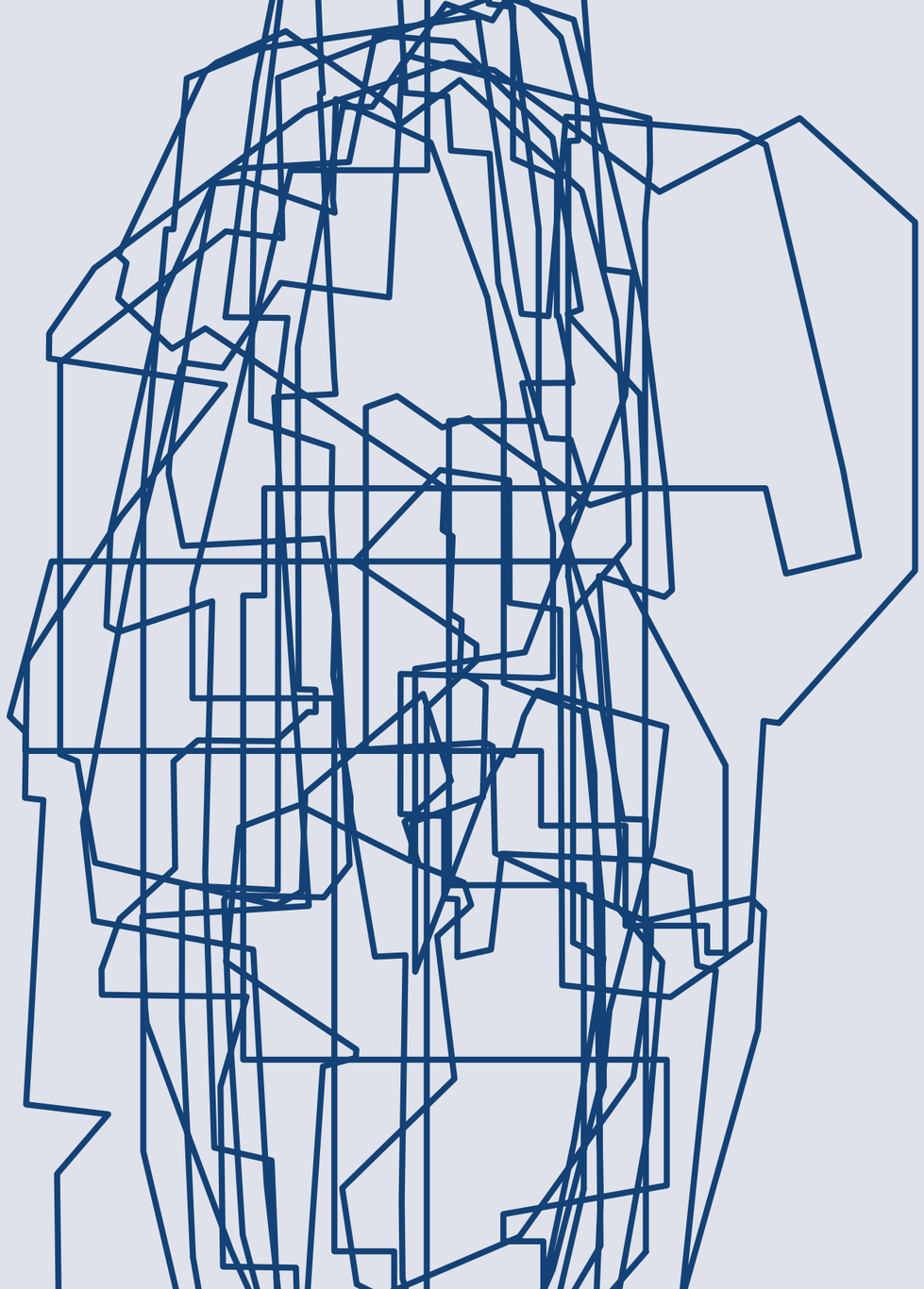

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Foreword

Some years ago, I had the great pleasure of assessing Urs Bette's PhD dissertation entitled *Unreasonable Creatures | in dialogue with an activated ground*, which represents the core of this publication. As a matter of fact, I personally recommended Urs Bette to publish his outstanding research work, and I am very happy that a re-edited version of the original manuscript has now been included in Murray Fraser and Jonathan Hill's highly estimated 'Design Research in Architecture' book series. The defence took place in October 2014 at RMIT University's Design Hub in Melbourne as part of RMIT's progressive Research by Practice programme initiated by Professor Leon van Schaik. I have been fortunate to attend a number of RMIT's Practice Research Symposiums as an external assessor, a peer and an unofficial member of this stimulating research community now also spreading into Europe from RMIT's new hub in Barcelona.

The conducted doctoral examinations at these Practice Research Symposiums are slightly different from a conventional PhD examination format. Besides the comprehensive written document, Urs Bette also presented a live exhibition of his own work at RMIT's gallery space. The overall research work represents a more extensive volume than the so-called Appropriate Durable Record, which forms the backbone of this publication. This publication includes a few images from the exhibition, and I am glad that Urs Bette made the effort to compile and re-edit his composite doctoral research project into a format more suitable for widespread dissemination. Urs Bette's research work is in my view an important contribution to the developing discourse of research into different creative processes covering a broad spectrum of related research topics, such as Research by Design, Research by Practice, Artistic Research and other branches of design research, to which this book series is reaching out.

There is a rich tradition of research, that is, in architectural history and architectural theory, but very little knowledge about this artistic and cultural legacy's inner creative logics, and very little investigation into the question of what spatial intelligence is and how it is being applied. Most architectural schools and universities are training their students in different procedures and best-practice methods to apply science. The often incredibly complex undertaking of 'applying art' has for some reason been regarded as a rather subjective and idiosyncratic endeavour not suitable for any scientific inquiries. A widespread view is that artistic creativity is unreliable in rational terms or at

least a singular phenomenon out of reach for any generalised knowledge, and that creative intelligence is artificial by nature and therefore ultimately fake – a synthetic thing not belonging to the real world.

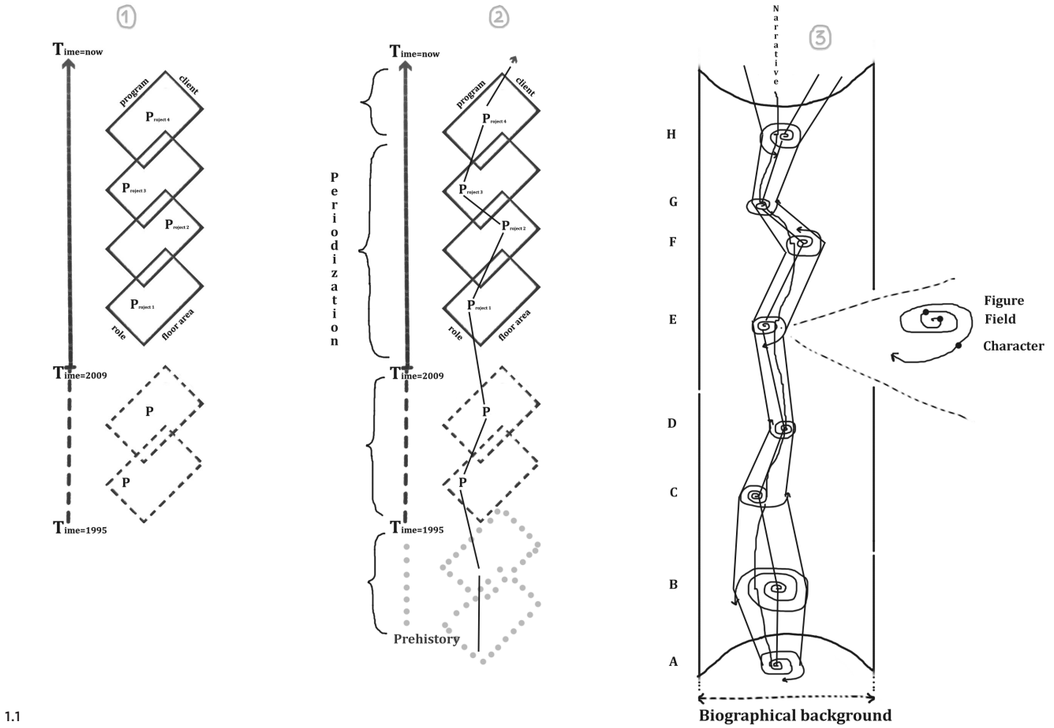
I think this misconception is lacking any foresighted understanding of the challenges of our advanced society. We are about to enter a future where artificial intelligence will play a major role. We might think of this new artificial intelligence as rather robotic – a logical and algorithmically controlled kind of intelligence we as artistic practitioners have nothing to do with. However, I think it is important to oppose this simplistic and limited understanding of artificial intelligence. I happen to be an architect, and I do see this book series as an important effort to open up this discussion – and I personally believe in the future of the 'sciences of the artificial' as promoted by the American economist and political scientist Herbert A. Simon.

The increasing scientific interest in the nature of human creativity and the question as to whether the 'eureka moment' of new creative discoveries can be analysed and studied through scientific inquiries and whether there are consistent processes at play provides a backdrop for this publication. While my profession has been trying to present our society with a context of justification for applying art, we seem to have forgotten to investigate the context of discovery where serious artistic play becomes a fertile ground for its transformation into a factual product. Urs Bette addresses this oversight.

I am glad to endorse *Unreasonable Creatures* and happy to see the additional material included in this publication. The discussions I had with Urs Bette during his doctoral defence are recorded and stored at RMIT's research library, but my personal notes and the comments I provided in the assessment report were not intended for publication. With permission from Urs Bette, I am pleased in this foreword to include some re-edited parts of my feedback and reflections on his research.

As stated in the Introduction, the overall intent is to validate the context of discovery or, as he puts it, the 'role of the unreasonable' in architectural design processes. The validation of this general intention is carried out by different measures throughout the book and becomes both an oculus for Urs Bette's investigation of his own methodological approach, as well as an overall framework for what I see as the main contribution to knowledge – a lucid demonstration of how a specific artistic context of discovery can be linked in a synergism with a rational and general consensus-based context of justification.

Through his own work, Urs Bette examines and elucidates how his creative process fluctuates between irrational/intuitive progressions and rational/objective steps of justification – and how he deliberately uses different representational tools to 'make sense' within these apparently separate epistemological realms. He is not using the established terms 'context of discovery' and 'context of justification' in his endeavour. Instead, he speaks about dialectics between 'form–space' and 'form–meaning', which he relates to an investigation of the morphological evolution of the 'object-oriented ontology' of his work.



1.1

1.1 Boris Brorman Jensen, *Three ideograms* | illustrating the author's cognitive schemata, Aarhus, Denmark 2018, © Boris Brorman Jensen

The morphological evolution at play in his creative processes is recorded through self-reflective mental mappings and physical model studies. The progression or morphological evolution is characterised by four steps: field, figure, character and dissection. Through these four steps, Urs Bette illustrates (1) how a transcendent field of ideas first encounters a site and (2) thereby turns into an immanent figure, then (3) further advances into a more matured architectural character accommodated by an activated ground, which finally (4) can be dissected as an architectural object in order to detect and test its relations with interior spaces.

The layers of insight stipulated in the research work are manifold. Beside a stringent introspective analysis of the trajectory of a whole career and an in-depth description of the creative processes immanent in the body of work, Urs Bette offers a

wide range of critical perspectives on both contemporary practices and the profession as a whole. He also provides a lucid demonstration of how creative inventions become applied art or architecture per se as a result of being conveyed back and forth between two opposing modes of assessment: emotive cognition and intellectual synthesis. By forcing his *Unreasonable Creatures* beyond the 'eureka moment' into a synergic loop between the two dissimilar epistemological realms – 'form as space' and 'form as meaning' – he provides evidence for the use of post rationalisations as a productive engine in creative processes.

The three ideograms (see fig. 1.1) are my personal interpretation of the three cognitive schemata or meta-structures used by Urs Bette in his self-reflective autobiography.

The first ideogram represents a simple indexical knowledge offered in the Appendix. Here, the different projects are sorted in a timeline with one temporal distinction between 'before' and 'after' establishing an independent practice, while at the same time he categorises projects according to rational parameters such as program, size, client and the author's role in the process.

The second ideogram represents a layered knowledge developed in the *Coinage* chapters indicating the existence of a coherent trajectory of autonomous authorship supplemented by a narrated autobiography suggesting a possible periodisation of the body of work. Included in this layered knowledge is also a prehistory connecting the mature artistic production with an early pre-professional understanding of objects in space.

The third ideogram represents an expanded transversal knowledge emerging in the fourth chapter *Agents*. Here, Urs Bette identifies and links relapsing dynamics in the creative discoveries' iterative processes, providing a kind of second-order pattern by dropping the hard-to-question autobiographic narrative into the background – and thereby providing a methodological knowledge recorded outside personal circumstances.

Boris Brorman Jensen

Introduction

Architecture in Dialogue with an Activated Ground: Unreasonable Creatures presents an investigation into the epistemological processes of my architectural practice, in which personal experiences are put in relation to a wider context. Themes discussed include the emergence of space in a staged opposition between the architectural object and the ground, and between emotive cognition and analytic synthesis in the design act. In both oppositions, there is a productive engagement with 'unreasonable' thought or behaviours. The work presented here documents an approach to architectural design in which these oppositions (confrontations) and the unreasonable are understood as constructive pathways towards developing the performative potential of designs that tap into local histories and voices, including those of the seemingly inanimate – the architecture itself and the ground it sits upon – to inform the site-related production of architectural character and space. In doing so, the work offers encouragement to accept the usefulness and validity of the unreasonable in architecture.

Through this research, I seek to validate the strategies I deploy to facilitate the poetic aspects of architecture within a discourse whose evaluation parameters predominantly involve reason. By examining my own work and that of other designers, I will show how relinquishing control and harnessing seemingly illogical actions can become tools in fostering the emergence of new ideas and solutions in an otherwise highly regimented environment. The context of my design work is set by the relationships between existing fabrics and a secondary layer of architectural form, whose investigation contributes to the discourse on sensible models of urban growth, unfolding strategies for retrofit, additions and densification. The work not only explores how the interests of multiple custodians and stakeholders are accommodated, but also examines the architect's responsibility to find even more histories and voices to actualise unrecognised potentials and desires. In doing so, the work offers a critique on the simplistic appropriation of modernity in architecture while also raising debates about the values pursued in design approval processes and the ways in which site relatedness is both produced and judged.

The inquiry is carried out through design projects and is reciprocally influenced by text-based observations. Accordingly, the findings are communicated in the language of the discipline – drawings, renders, photographs – and accompanied by a written exegesis. The introspective analysis of my

architectural work and the in-depth description of the creative processes steering it offer a critical perspective on my own work in relation to that of other designers and architects. Unfolding the characteristics of my practice, the investigation underwent three steps of reflection: understanding the aims and concerns of past work, testing the gained insights against projects that are currently in production and finally speculating about the ramifications of this research for future design works.

The research investigates how unreasonable processes contribute to architectural production when balanced with intellectual synthesis. Other dualities include working between Austria and Australia, and the alternating roles occupied within the practice-based research of being both the observer and the observed. It was expected that the overlay of these three different dualities – unreasonable versus analytic, observer versus observed, Austria versus Australia – would allow me to discern the blind spots in my practice and unfold insights that are of value to the wider community, addressing issues, values and questions inherent to the design and production of architecture in general. Dialogues with my peers and critics at RMIT's Practice Research Symposiums have informed the investigations documented here.

The text is structured into 15 chapters that guide the reader through my reflective practice.

Coinage | personal introduces my non-architectural background that established my spatial intelligence.[1] It concerns aspects of growing up in a family of designers and makers, as well as my studies in communication design, both of which influence the manner in which I practise today.

Coinage | austrian reveals the key notions and sensibilities of a community of artists, practitioners and intellectuals embracing sculptural architecture in Austria, which have influenced my architectural upbringing. Similarities and differences in their architectural values and corresponding design tools are identified.

Coinage | angewandte examines the ways in which the University of Applied Arts Vienna and my related travels have influenced not only my own and fellow peers' value systems, but also the way in which I teach architecture in a different academic context today.

Coinage | mentors introduces peers and role models that have informed my practice and manner of operation. It outlines similarities and differences in the methods and values we pursue and relates them to a wider context.

Modes | unreasonable examines a threefold project choreography, defined by a central spine of morphological genesis, and two different modes of interrogation: one emotive, the other analytic. The chapter then expands on the ways in which the unreasonable is intentionally incorporated into my own practice, as well as those of other designers and artists.

Modes | analytic interrogates the way in which I aim to view a design task through

the eyes of an external observer. This leads to a discussion around second-order observation and the role of graphic representation in determining purpose and meaning beyond my own personal agendas.

Agents | characters is devoted to illustrating the evolution of a project from field to figure to character. This is placed in relation to the modes of operation (emotive cognition and intellectual synthesis), the overall aims and the cultural background of my practice. After addressing past work and present tendencies, future developments are foreshadowed.

Agents | space investigates the way in which different forms of space materialise in response to mediating the dialogue between the architectural object and its context. This is discussed in relation to my Austrian coinage and the processes I deploy to sense and cultivate the poetic qualities of architecture.

Agents | ground explores how I tap into local histories and voices to inform the site-related production of architectural character and space. While questioning traditional notions of site relatedness, the work investigates the performative relationship between object and ground, and why people have emotional responses to architecturally designed spaces.

The following chapters set out to validate the previously described revelations by examining projects from different work scenarios – built, speculative, experimental and teaching.

Case study | speculative reveals in which ways strategies developed in architecture may be relevant to landscape projects as well, shifting the previous focus on formal expression towards the performative relationship between object and the ground, using the *River Torrens footbridge* project as an example.

Case study | built follows the project *Thalia Graz* and explores how urban consolidation policies are increasingly challenging architects to work on sites that are articulated by multiple custodians and stakeholders. It also examines the architect's responsibility to identify even more histories and voices, appreciate unique conditions and realise individual interventions.

Case study | experimental examines how artistic installations allow me to explore the topics of my research in a medium that is free from programme or functional constraints, revealing the aspirations and contradictions that are present in my work. *Dissecting the whale* is the most recent step in this series; it reads as a synthesis of my past practice while also providing an outlook into future work.

Case study | teaching links my role as a teacher with my architectural design research, showing how explorative techniques are employed to lure students beyond their comfort zone, recognise the affordance of form and reflect on the alternative realities that may be developed from it.

Conclusion draws together 'what', 'how' and 'why' I design the way I do. It

summarises the different investigations, highlights its major discoveries and speculates on the implications for future practice arising from this research.

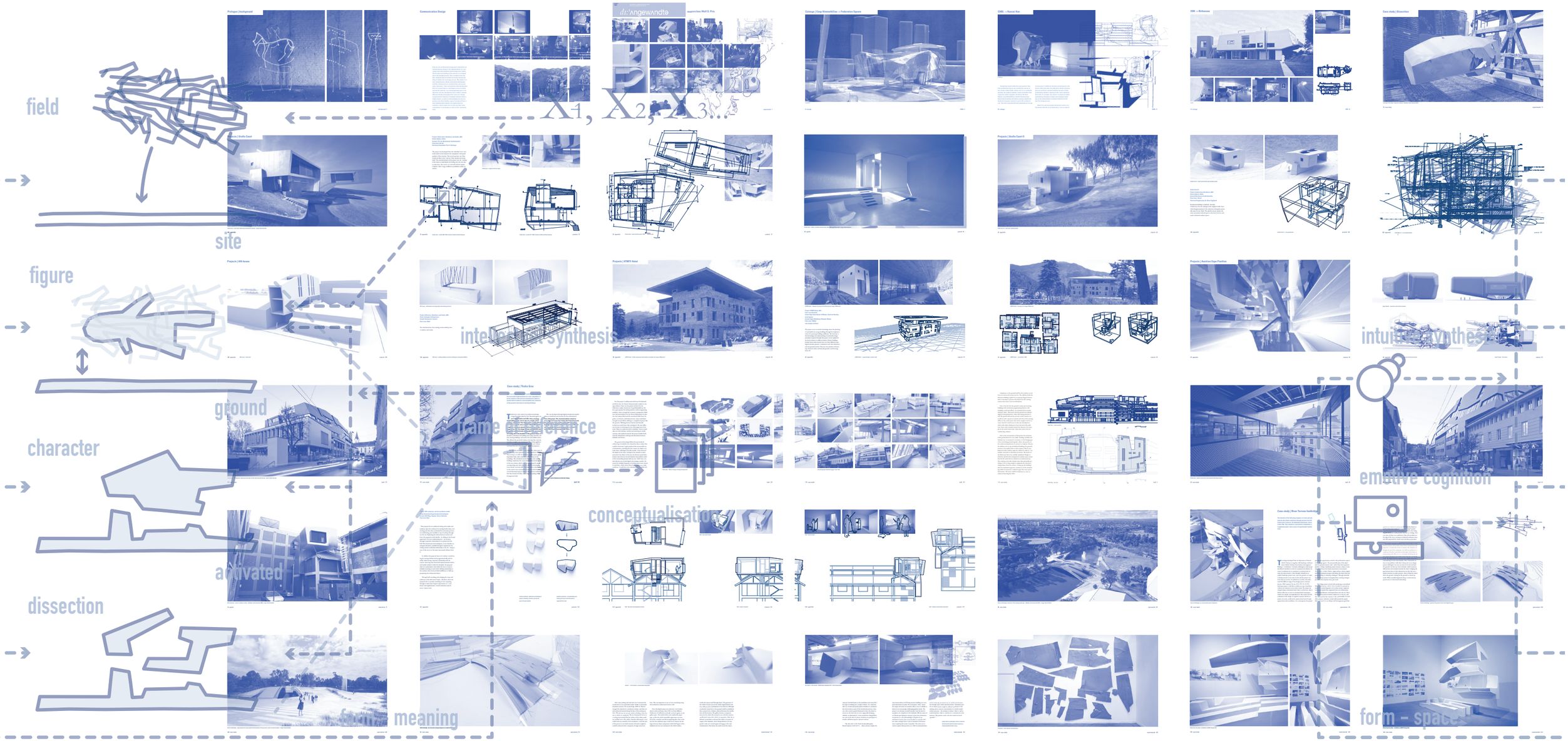
* * *

Acknowledgements—Architecture is a team effort. This publication would not have been possible without the commitment and creative input of the numerous collaborators and helpers with whom I worked on the projects described here. My appreciation, first and foremost, goes to them. The research commenced as a PhD at RMIT University, Melbourne. I would like to thank everyone contributing to their Practice Research Program, and in particular, Martyn Hook for his encouraging and observant guidance. I would also like to thank the many practices and institutions that have provided image material, without which the publication would be incomplete. A special thank you goes to Athena Kerley for perceptively editing my texts, to Murray Fraser and Jonathan Hill for including my work in the Design Research in Architecture series, and to the team from UCL press for putting it all together so professionally. Finally I thank Margit Brünner for her loving support and creative collaboration, enriching my life and practice.

Note

1. I use the term with reference to the work of Leon van Schaik in *Spatial Intelligence*.

2.1 following page:
Project matrix | covering past and present practice, Melbourne, Australia 2014


field
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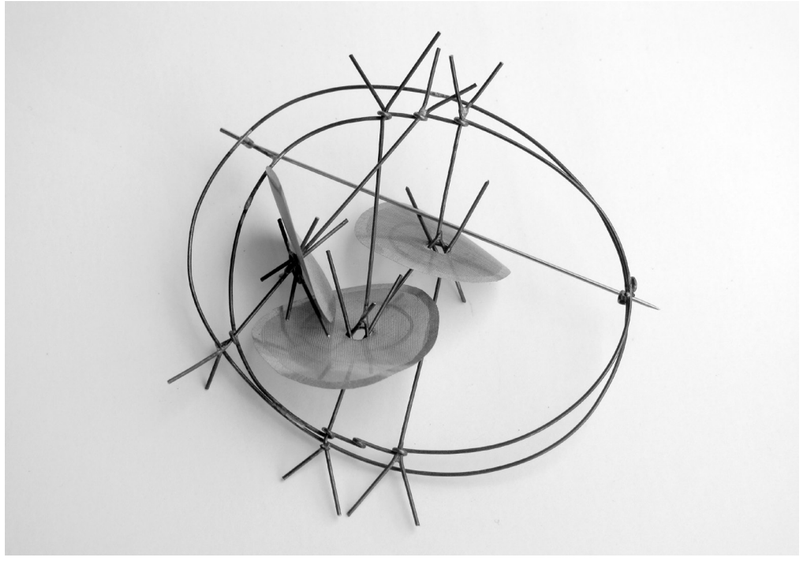
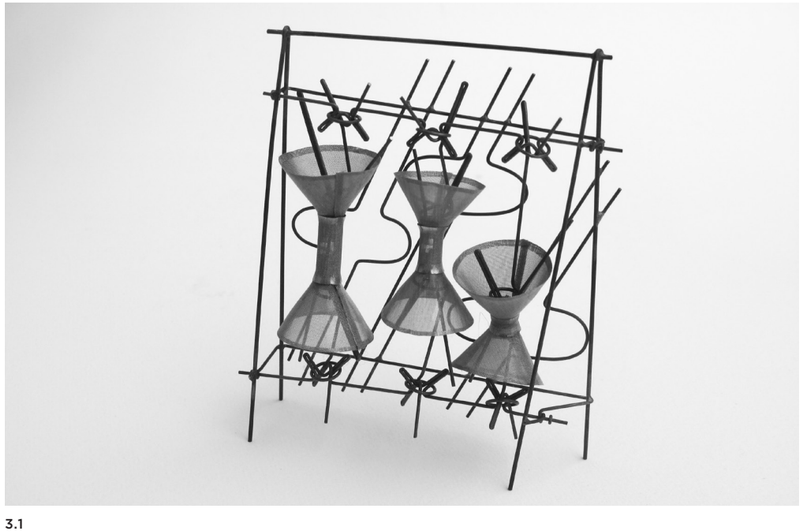




3.1

3.1 **Franz Bette,** ***Poetic space,*** steel wire and mesh, Frankfurt, Germany 2006, © Ben Newton

Coinage | personal

Drawing on Leon van Schaik's proposition of spatial intelligence, I reflect on my personal background, the design values that were present growing up in a family of designers and makers, my early studies in photography and film that have shaped the way that I look at the world, and how this translates into the manner in which I pursue my architectural designs today.

Background—I grew up in a designer's household, surrounded by objects, materials and questions concerning ideas and their physical implementation. My mother was a painter. My father is an artist, designer and maker. He is renowned for his kinetic jewellery, playful and poetic work, like wearable sculptures, interrogating the qualities of space and movement, and constantly changing in the hands of the wearer. Sabine Runde, Deputy Director and Curator at the Museum of Applied Art Frankfurt notes:

'Bette experiments with confining motion – motion characterised by an implicitly mechanical back and forth movement incidentally enhanced by the effect of changing perspectives. In this way, he attains an organism which moves with apparent naturalness. From within his creative fantasy, he develops invisible joints in openly exposed construction of self-evident simplicity. The construction, basically technical, mutates into an organism in his hands.'[1]

An object that epitomised my early understanding of contemporary design was my father's knife, a Puukko sheath knife (1961) designed by Tapio Wirkkala.[2] It followed the typology of a traditional Finnish hunting knife, but was reduced to almost the diagram of a knife. Yet – and I believe this is important – it had a soul and character. It was rational and poetic at the same time: rational in terms of its usability, poetic in regard to the connotations it evoked. My upbringing conveyed to me that design was not about an interchangeable look, but the consequential implementation of a conceptual idea that manifests itself through form. Wirkkala was a designer as much as a maker, whose work was grounded in an intimate knowledge of materials and the haptic qualities of form. His studio was the place for both conception and production. Similarly, my parents had their studios at home, and I was always surrounded by the process of making. What I took from there is the attitude that handling the material is an integral part of the thought and design

3.2

3.2 ***Untersberg*, gelatin silver print |** discussion about what I bring to a site and what I take from it, Salzburg, Austria 1986

process. I believe this is still manifest in the way I work with physical models today, and how I play with things in order to generate an idea. Form is produced intuitively.[3] Its interpretation kick-starts the conception of an idea. Then, both form and idea are shaped through intellectual and empirical reflection.

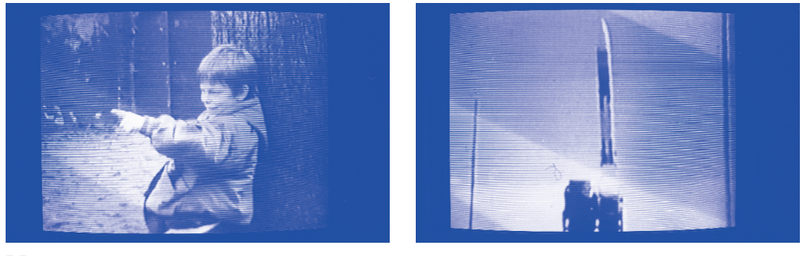
Summer Academy—My first endeavour in consciously working creatively myself was in 1986 at the International Summer Academy for Fine Arts in Salzburg, Austria. It was founded as the *School of Seeing* by Oskar Kokoschka[4] in 1953. Operating since then, it offers a broad range of courses in fine and applied arts. Amongst others, Peter Cook, Coop Himmelb(l)au, Günther Domenig, John Hejduk, Hans Hollein, Arata Isozaki and, more recently, Ryue Nishizawa and Kazuyo Sejima have taught there. To explore a field that was different from what I grew up with, I enrolled in a photography class by Verena von Gagern. There, I produced a series of photographs that investigated the Untersberg, a mountain near Salzburg with a somewhat mythical connotation that had been established through legends, literature and popular culture. Using a pinhole camera, the long-exposure photographs showed hands caressing stones that I had brought back from my excursions to the mountain and its quarry.[5] These photographs could be considered my first site-related works and a discussion around what I bring to the site and what I take away from it. Further, it constituted the start of an ongoing interest in the monolith – the isolated object extracted from its origin and placed into an alien context.

Museum Abteiberg—The *Museum Abteiberg* (1982) in Mönchengladbach, designed by Hans Hollein, was the place where I first became aware that architecture is not a backdrop but an actor in its own right. There, I realised how space makes a difference to the perception of art, as well as being a tool to initiate and organise the audience's experiences. It was significantly different from what I had seen until then. Hollein designed an anti-hierarchical building, where instead of the institution ruling the way that art was perceived, the user would stitch together their own spatial sequences by choosing alternative routes. The building was commissioned by Johannes Cladders, who had given Joseph Beuys his first major retrospective and thus put Mönchengladbach onto the map. In an interview with Hans Ulrich Obrist, Cladders explains that the commission emerged from curating an exhibition of Hollein's own work. In the lead up to this exhibition, they hypothetically discussed the ideal museum which years later led Cladders to commission Hans Hollein directly. Cladders describes: 'I wanted a building with a little bit of a jungle, where I could lose myself, and so be forced to find landmarks. I wanted a democratic museum . . . that has no predetermined route, [where] I have to decide for myself . . .'.[6]

Film and constructivism—Next, I enrolled in Visual Communication Design at the University of Applied Sciences in Düsseldorf, Germany. The school had a focus on graphic design and advertisement, from where I deviated towards

photography and film. In this time, the West German Broadcasting Corporation screened an influential production called *Freistil: Mitteilungen aus der Wirklichkeit* (1989) [Freestyle: Messages from Reality], directed and produced by Thomas Schmitt.[7] *Freestyle* introduced me to an associative form of thinking, seeing and writing that fluently traverses between different media, techniques and aesthetic expressions in order to offer new perspectives on established cultural phenomena and practices. In doing so, the series uncovered coherencies between seemingly unrelated topics. It not only articulated the many different realities that we individually create when stitching together the pieces of our own perception, but also showed how the interpretation, conceptualisation and construction of reality towards a societal narrative is influenced by media production. Each broadcast covered different aspects of overarching, often existentialist, themes entitled (e.g. *War and Flying*, *Gardens or the Virgin Mary*, *Lyotard's Nose*), juxtaposing vintage documentaries, art history, performances and interviews with philosophers and scientists such as Baudrillard, Virillio, Kittler and Pynchon. Schmitt did not try to explain the world. Instead, he tempted the audience to establish the missing links and interpretations themselves. This is similar to the way that Hollein did not determine the 'right' passage through the Museum Abteiberg, but rather gave the visitor different routes from which to choose.

Another important work was the movie *Suspicious Minds* (1991) by Peter Krieg.[8] It introduced me to constructivism and second-order cybernetics[9] by juxtaposing Heinz von Foerster (as a magician) and Humberto Maturana in a series of interviews alongside different Elvis impersonators. The film informed two works of mine: *Hamburg, März 1991*,[10] a video produced for the Hamburg No Budget Film Festival (1991), and my thesis project, *50 ways to leave your TV* (1992), a 16-mm film. Both question the general assumption that our perception apprehends reality in the way that a camera throws a picture onto a film, an image of the world 'outside'. Yet, its depiction is not a mirror but an individually and actively formed construction that might tell us more about the 'observer' than about



3.3

3.3 **Bette, Berner, Hirdes, *50 ways to leave your TV*, 16-mm film |** interrogating the role of the observer in the construction of reality, Düsseldorf, Germany 1990

the 'observed'. The film *50 ways to leave your TV* undermines the media's role model of superior access to reality through a series of experiments and metaphors revolving around human perception. *Hamburg, März 1991* plays with the viewer's perception by successively introducing multiple layers of information until the overload forces the viewer to make a selection and stitch together his/her individual understanding of the plot, producing *n* realities, all equally true. Thoughts on perception still inform my design process today when I iteratively switch between developing an empathy for my design protagonists and assuming the role of an external observer who aims to put things into a shared context. In doing so, I recognise the existence of multiple realities within a single project, as well as acknowledge my own projections onto them. Another aspect I transferred from visual communication design is the conscious differentiation between the signifier and the signified, which I make use of when steering connotations in the booklets that accompany my designs.

From my non-architectural background, I adopted the understanding that design is the implementation of a conceptual idea that manifests itself through form. Further, I realised that physically handling the material is an integral part of the thought process. This is evident in the way that I integrate physical models and the manual handling of materials into my design processes. My studies in visual communication design, particularly photography and film, introduced me to constructivism and second-order cybernetics. They conveyed the understanding that there is no such thing as a privileged access to reality, and that the observer is an indistinguishable part of the observed. This has informed the way in which I assume different identities throughout the course of a design, recognising the existence of multiple realities within a single project, as well as acknowledging my own projections onto them. Another aspect I transferred from visual communication design is an appreciation for semiotics, which I make use of in the way that I steer connotations in my designs as well as their representation.

Notes

1. Runde, 'per aspera ad astra', 11.
2. Finnish product designer, 1915–85.
3. I use the term in relation to those immediate judgements that bypass a conscious and rational analysis and recombine chunks of embodied knowledge, which I tap into when attempting to empathise with either an object or the ground.
4. 1886–1980, Prominent Austrian illustrator, painter and writer, whose work is related to expressionism. Studied at the Kunstgewerbeschule (School of Arts and Crafts) in Vienna, which later became the Angewandte (the University of Applied Arts Vienna).
5. The sculpture classes were held there. I was contemplating doing sculpture instead of photography, and to some degree, this became true by pursuing architecture.
6. Cladders, Obrist and Boutoux, *Interviews*, 155–65.
7. Thomas Schmitt, 1949–, a German author and director, Professor at the Academy of Media Arts Cologne.
8. Peter Krieg, 1947–2009, a German documentary filmmaker, producer and writer. Krieg combined intellectual curiosity with a political agenda that saw film as a tool of enlightenment, and also had an interest in the technical issues surrounding production, especially interactive screening.

9. Constructivism and second-order cybernetics are concerned with understanding self-organising complex systems, such as cognition or society, which can only be observed from within the system itself. Therefore, the observer is always part of the observed, affecting the system as well as being affected by it. See Gregory Bateson, Margaret Mead, Heinz von Foerster and Ranulph Glanville.
10. With Nowak, Iserloh and Friel, 1992, Düsseldorf, mediaartbase, ZKM Karlsruhe, Germany 2010, http://www.mediaartbase.de/handle/10858/1705 (accessed 8 July 2014).

4.1

4.1 **The mantra of Coop Himmelb(l)au's leaping whale,** epitomising man's irrational battle against gravity, © wildestanimal/Getty

Coinage | austrian

An autobiographical view unfolds along an explication of key notions and artistic sensibilities that have been nurtured by a recognised community of artists, practitioners and intellectuals who have shaped my method of working, thus establishing the research within a sculptural aesthetic tradition in Austria. While I acknowledge that this tradition is tied into the wider context of expressionist architecture in early twentieth century Europe, I hold my investigations within the realm of my immediate context and my first-hand experiences, keeping in line with the 'by practice' mode of this investigation.

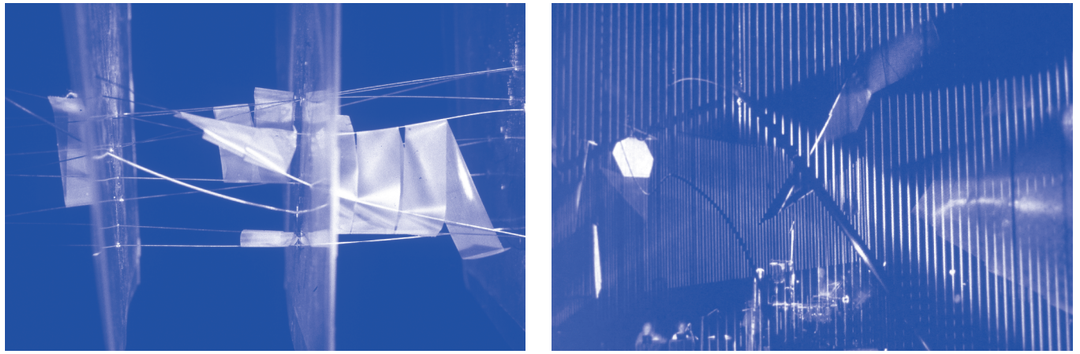
Moving to Austria—After finishing my degree in Visual Communication Design in Düsseldorf, Germany, I investigated studying architecture. Architecture appeared attractive to me because it serves basic human needs while at the same time allowing for experimentation, artistic expression and invention. While orientating myself, I discovered *Architecture is Now*, the first monograph by Coop Himmelb(l)au, showing their early works, including manifestos such as *The Poetry of Desolation* (1979) and *Architecture must burn* (1980). I had never seen anyone talk about architecture in this fashion. I was impressed by the direct and open expression of emotions and personal motifs, steering designs that were not solely derived from functional or aesthetic parameters. Further, the projects had an underlining utopian agenda[1] that appealed to me. The directors, Wolf D. Prix and Helmut Swiczinsky, appeared to be authentic and truthful about themselves and the way that they approached their work. I was intrigued by the level of authorship they had over their work, which made me aware of the difference between a 'service practice' and an architectural office that was able to pursue its own agendas parallel to delivering on programmatic demands. I decided to apply for an internship. I had an interview with Wolf D. Prix, who offered me a position as a graphic designer in their team, suggesting that I could gradually expand into architectural jobs while studying in his master-class at the University of Applied Arts Vienna. The following week, I moved to Vienna.

Working at Coop Himmelb(l)au—At the time, the Himmelb(l)au office was situated at Seilerstaette 16, just opposite the *Ronacher Theater* (1987), for which they had won the competition for redevelopment. However, the project was never built due to a political backflip. Everyone in the

office was working on *Construire le Ciel* (1993), the Coop Himmelb(l)au solo exhibition at the Centre Pompidou in Paris. The office was running at a pace and intensity that I had not experienced in any other workplace before. Everyone was expending themselves. My impression was that I had fallen into the engine room of a steam ocean liner running at full speed, and everybody was shovelling coal into the furnaces 24/7. Somehow, I managed to hit the ground running and make myself useful. I started working on a wide array of different graphic design jobs: booklets for project presentations, competition boards, model photography and photomontages. All architectural design work was done through physical models and hand drawing, with the only computer being the one on which I did graphics. Models in different stages of completion dominated the space. The dedicated workshop area was huge, probably half of the entire office area, and equipped with woodworking machinery that was operated day and night. Successively, I was drawn deeper into project visualisations and building detailed physical models.

In my second year in Vienna, I started studying in Prix's master-class at the University of Applied Arts Vienna, the Angewandte, while still working in the office yet gradually reducing the workload and only coming in for competitions such as *Cloud #9* (1995), *Kansai-kan* (1996) and *Federation Square* (1997). The workflow for those projects was always similar. We would receive a concept drawing from Prix, which we were asked to read and translate into mass and sketch models. Prix would then select one or two and have us iterate them according to his ideas. Once the volumetric polystyrene models captured his intent, we would shift scale and switch to producing sketch models made from foam core. While we were gradually shifting from sketch to working models with each round of alterations, they were all roughly held together using pins and Scotch tape. As can be seen in the picture of the *Federation Square* proposal (fig. 17.20), even the final design has a working model character with pins and tape all over it. The volumes were made from polystyrene blocks that relate to the programmatic needs, and were covered with thin overhead foil to give them a form. Only in small-scale projects such as *Der Weltenbaumeister* (1993)[2] would we immediately work on as hollow objects. In this instance, piano wires were pierced through a number of vertical planes that all carried the same initial sketch. Scotch tape was wrapped around them to interpret the drawing and describe different volumes. The model was then documented by photographs, which formed the basis for the hard-line drawings and implementation in a metal workshop.

Similarities and differences—Through working in their office, I adopted the reliance on physical models as well as the unpretentious blending of digital and analogue design tools, which are used in whichever capacity they serve the job best. A digital workflow facilitates a precise and repeatable process that effectively leads towards implementation. Yet, in terms of



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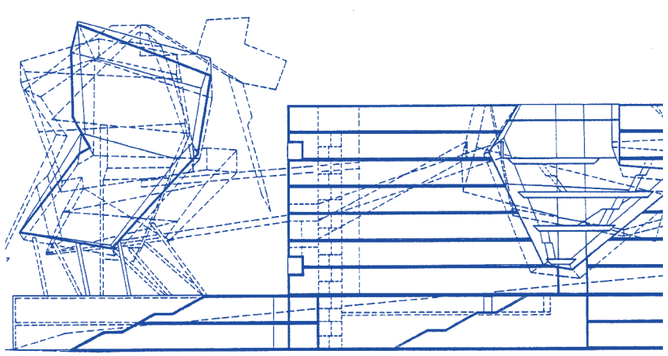
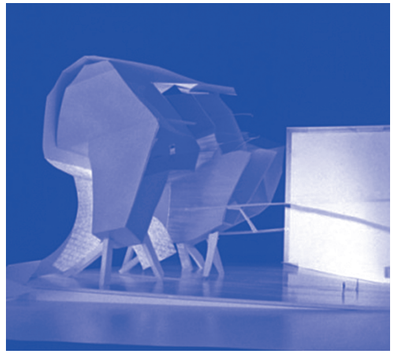
4.2 **Coop Himmelb(l)au, *Der Weltbaumeister*,** stage set, Festival Steirischer Herbst, Graz, Austria 1993, © Markus Pillhofer

evaluating the formal and spatial qualities of a design, it cannot compete with physical models. On the screen, it is easy to make any geometry look good, and it is very hard not to be betrayed by wishful thinking when adapting the view parameters to achieve a desired impression while assessing the design itself. In comparison, a model, viewed through your own eyes, does not lie. What you see is what you get. Even with the full advent of computer graphics and all its possibilities, Coop Himmelb(l)au still rely on physical models during all stages of their design projects. I participated in building a massive 1:33 model of the *BMW Welt* (2001) competition entry in order to produce a project visualisation for the BMW board of directors. The film was shot on 35-mm film, with cinematic lenses previously used for *The Lord of the Rings*, and later combined with computer-generated imagery in post production. This was one of the few models made for presentation only. I would say that 90 per cent of Himmelb(l)au models are working models, produced to be experimented with and constantly altered in order to assess the design. The majority of them are created from white foam core, polystyrene foam and Perspex, taped and pinned together, bearing the marks of earlier design stages.

Relationship to Prix—Moving from graphic design to architecture was more incisive than I had anticipated, not because of the complexity or different nature of the task, but in the way it changed my relationship to Prix. He is an abrasive character, who expects his opposite to argue for their position and thus gain his respect. With graphic design, I was working in a field of my own expertise, giving me confidence to





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4.3 **Coop Himmelb(l)au,** ***Kansai-kan – The Library and Museum of Knowledge***, Kyoto, Japan 1996,
© Coop Himmelb(l)au
© Markus Pillhofer

defend my position when questioned. This changed when moving into architecture, Prix's turf, where his self-assertiveness made me doubt my decisions and at times undermined my confidence, thus affecting our relationship. Himmelb(l)au endured a long struggle for success, in which Prix and Swiczinsky demonstrated their ability to persevere and stay true to their ideals. The current project was always at the centre of attention, no matter what. In their office, I learnt to put personal hurdles aside and face the demands of the project. Pushing through is one of the key aspects I learnt at Himmelb(l)au. I toughened up, giving me the confidence to perform in similar situations today. What keeps me calm in a tight situation nowadays is the embodied knowledge of having been able to plough through in the past. Once, we were working on a competition entry for weeks. One day before the final hand-in, Helmut Swiczinsky walked into the model workshop, looked at the model, started questioning the overall design and demanded that we change it entirely overnight. One of us immediately walked out of the office, but somehow we managed to accommodate the changes and submit in time. Admittedly, I have had enough of doing this for others but have subsequently tried to imbue my own practice with a similar level of commitment.

Austrian sculptural architecture—Jeffrey Kipnis writes:

'The extraordinary Günther Feuerstein rekindles and fans the flames of experimental architecture in Austria with his club

seminars, reintroducing historical discourse and the discredited modern internationalists with the same vigor as he approaches the then-current speculations of Superstudio and Archigram. Under his influence, students Wolf D. Prix and Helmut Swiczinsky travel to the Architectural Association in London.'[3]

Feuerstein, who is both an observer and contributor, starts his genealogy of Austrian architecture with Frederick Kiesler, whose *Endless House*[4] (1950–60) examines the transient relationship between inside and outside, as well as the transformation of space through continuous surfaces. The work visibly resonated with Hans Hollein, as can be seen in his Berkeley Master's thesis *space within space within space*[5] from 1960, as well as in the monolithic urban proposals he produced, partly in collaboration with Walter Pichler, of which *Superstructure above Vienna* (1960) is just one example.[6] While Kiesler's versions of the endless house remain at the stage of hypothetical designs, Fritz Wotruba advances sculpture into built architecture with his design for the *Church of the Most Holy Trinity*[7] (1974) in Vienna, known as the *Wotruba Church*. Feuerstein concludes that Kiesler and Wotruba are both 'exemplifying a new synthesis of sculpture and architecture'.[8]

Hans Hollein—Hans Hollein has always supported the fusion of art and architecture. In his 1962 lecture *back to architecture* at Gallerie St Stephan in Vienna, he condemns the 1960s interpretation of modernism that 'sees architecture as the contouring of material functions, instead of being the transformation of an idea through building'.[9] For Hollein, the essence of architecture lies in a spiritual and sensual event that exists as a surplus embedded in form. Hans Hollein writes:

'Architecture is both a spiritual as well as a functional matter; it has psychological as well as physical concerns. Architecture is on one side a ritual phenomenon and on the other a means of preservation of body temperature. Between these poles, architecture in all periods and all civilisations and cultures ranges. Man has always striven for – and built for – survival; survival during life, but equally important, survival after life. In human activity, there is duality, and my architecture reflects this in a dialectic between the natural and the artificial, the anthropomorphous (and amorphous) and the geometric. The non-quantifiable is as valid a concern as the quantifiable. Years ago, I made this statement: "Everything is architecture". My work consciously covers a wide range. There is no difference between outside and inside, between the exterior and the interior. I see urban design, architectural design, product and object design as one integrated whole. I see myself as an architect and as a free artist, sometimes by metaphors and metamorphosis, sometimes by abstraction, by sculpting space. Architecture is a work of art.'[10]

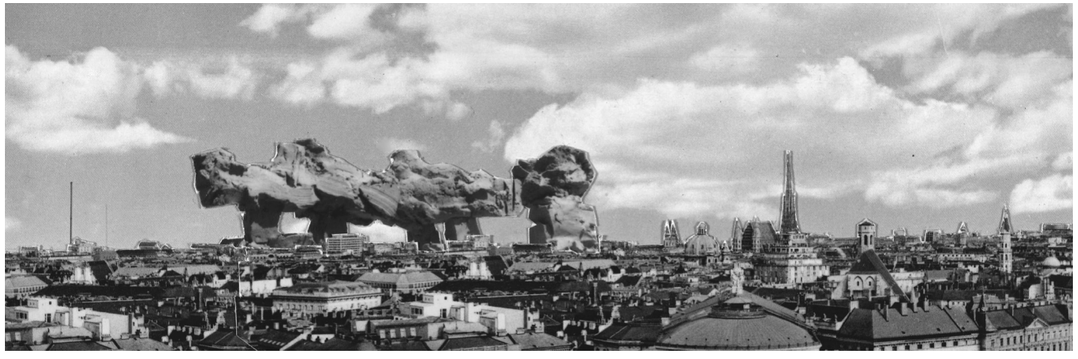
The sixties—In the late sixties, Hollein's monolithic forms devolve in favour of light,

4.4

4.4 **Frederick Kiesler, *Endless House,*** New York 1959, © 2014 Austrian Frederick and Lillian Kiesler Private Foundation, Vienna, Austria

flexible and ephemeral installations. His conceptually ingenious *Architekturpille, Non-Physical Environment* (1967) translates into an inflated *mobile office* (1969), one of the many pneumatic structures that popped up in London, Milan and Vienna at the time. On 8 May 1968, Coop Himmelb(l)au set up the *Villa Rosa*, a pneumatic installation that propagated an architecture that was as light and changeable as clouds. And in the same year, Haus-Rucker-Co extended their bubbles from individual apartments into the public space. All were examples of a widespread tendency to combine introverted cocooning, inspired by the first space travels and questions around the minimal habitat, with the appropriation of public space. Feuerstein points out that 'Vienna's young architectural avant-garde distinguished itself quite clearly from simultaneous international trends by continuously aiming for action and production, and not being content with the mere creation of drawings',[11] and suggests that the influence of Viennese Actionism[12] inspired them to take more radical action. Austrian architectural teams, such as Coop Himmelb(l)au, Haus-Rucker-Co, Missing Link, Salz der Erde and others, adopted actionism's key themes of pain, sickness, wounding and death for their pamphlets and architectural concepts, and translated its introspective exhibitionism from the level of the individual to that of the city. In 1976, Coop Himmelb(l)au demonstrated the potential of public space by organising the *Supersommer* – a series of events and exhibitions spread throughout the city.

Fighting the system—Forty years later, Wolf D. Prix calls Austria a 'Toy Poodle Republic'[13] whose architects 'are the sardines in the shark tank of a rotten building culture. We are the end of the food chain and rather many. Unfortunately, we don't have any swarm intelligence'.[14] He accuses political decision makers and architects of obeying the populist mainstream by not standing up and defending the liberty of arts and architecture: 'Foreignness, otherness, waywardness and uncertainty were and still are ostracized. The unfamiliar, which should arouse curiosity in the other, is expelled'.[15] Most people viewing from the outside see Austria as having a high-level reputation in architecture and therefore would assume that it is highly respected locally as well. Yet, one of its major protagonists paints a bleak image of the situation. While the outside perspective is primarily focused on final results and published



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4.5 **Hans Hollein, *Superstructure above Vienna,*** Vienna, Austria 1960 (detail), © Centre Pompidou, Dist. RMN-Grand Palais/Georges Meguerditchian

work, the insider reflects upon the circumstances in which the work is produced, the daily grind.

The societal mainstream in Austria sees the cultural contribution of architecture being primarily fulfilled by heritage buildings, of which there are plenty. In particular, Vienna's first district, the city centre enclosed by the Ringstrasse, is formatted by magnificent historic palaces and residences. Coming from Germany, where nearly all city centres had been levelled during the war, this is an impressive sight. On the downside, the city centre is guarded like an open-air museum, not leaving much room for contemporary work. Prix's critique is thus aimed at the cowardice within the political class, for which culture is a label conveniently synonymous with an established 'high culture' and heritage, rather than an artistic endeavour that needs to be continuously renegotiated in order to be kept alive. I tend to suspect that his attack at the institutions is the expression of an internalised conflict that is based in Himmelb(l)au's history, particularly their long struggle for recognition and wait for large-scale commissions.

New developments were further hampered by Vienna's geopolitical location next to the iron curtain, at the edge of Europe and therefore on the margins of economic development. In his foreword to Feuerstein's book *Visionare Architektur: Wien 1958–1988*, Peter Cook writes:

'There was once a time when Vienna was the centre of the civilized world, a world of ideas, refinement, and ingenuity as well as delusions. And only such a world can produce great architects. Do not believe all the honourable people, who insist that

architecture is necessarily the result of systematic thinking, correct political attitudes, objective reasoning and neatly framed sheets of drawing paper . . . The architects and the architectural discussions in Vienna during the past 30 years have been spared from the boom we had to suffer in the busier cities of the West . . . While talks in London were conducted in light of the unspeakable banality in every street you looked at, so few new buildings were erected in Vienna that the discussions could be kept conceptual rather than be tainted by reality.'[16]

Cook interprets the lack of business development as a chance to concentrate on architecture as a cultural endeavour rather than a commodity, and points out that unfavourable circumstances can be a prerequisite for critical minds to develop and express their distinct position. It may sound sardonic to the ears of Wolf D. Prix and Helmut Swiczinsky, but the hard times probably served as a foundation for their persistence, which they can now harness for the rigorous implementation of their ideas in built work. To use their own words: 'The tougher the times, the tougher the architecture.'[17] Unfavourable conditions are not a key to innovative architecture, but they possibly play a role in strengthening an architect's position about his or her aims. In the absence of clients' directives, while designers still want to engage with the world, they have the time and freedom to listen to their own desires, follow them through with limited means and thus develop the resilience needed to pursue their own agendas in what is generally considered a service industry.

Institutional support—I believe we can attest that Austria still produces quality architecture. If this is the case, does this mean that the conditions do not need to be favourable in order to produce quality architecture? Are Austrian architects particularly adept at defying the circumstances? The level of business development may have been lower in the past compared to other countries, but the interests of architects as well as clients are well represented by various lobbying bodies that set the cultural background and the conditions for the procurement of architecture in Austria. All community projects with a budget larger than $150,000 have to be publicly advertised for tender, and those from $10 million upwards have to be run

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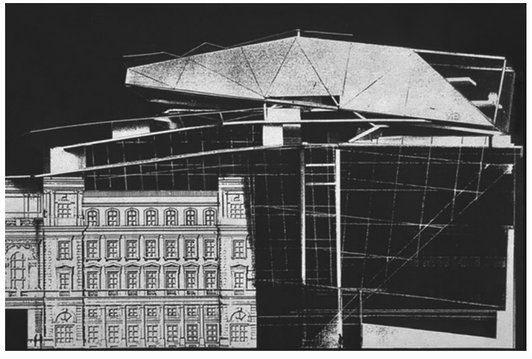
4.6 **Hans Hollein,** ***Aircraft-Carrier-City in the landscape,*** Austria 1964, © The Museum of Modern Art/Scala, Florence, Italy

as competitions. Two of my peers have managed to get a 'leg in' by successfully participating in housing competitions,[18] of which some explicitly focus on younger architects or recent graduates. The *Thalia Graz* (2014) project, although undertaken by a private investor, was run as a competition because of the delicate urban planning and cultural heritage conditions of the site. The competition had been instigated by a public outcry over the poor design of a directly commissioned proposal for the same site. This would not have happened without an architecturally educated audience.

It was in Graz where the first *Haus der Architektur* [House of Architecture] was established in 1988, and it became the role model for similar institutions all over Austria. These *Houses of Architecture* are a combination of exhibition, event and research facilities. They assume the role of conveying the importance of architectural discourse to the general public through exhibitions, workshops and publications, as well as being the facilitator of debate amongst architects, planners, artists and politicians. In *Dialogues in Time*, Peter Blundell-Jones describes the political and cultural environment, which during the 1980s led to the establishment of the *Model Steiermark*, one of the most successful examples of political patronage in the name of architecture. It led to the *New Graz Architecture*, whose most prominent and internationally successful members are Volker Gienke, Gunther Domenig, Eilfried Huth, Klaus Kada, Michael Szyszkowitz and Karla Kowalski.[19] The *Kunsthaus* in Graz by Peter Cook and Colin Fournier (and in its wake also our Thalia project) would not have been possible without the history of persistent



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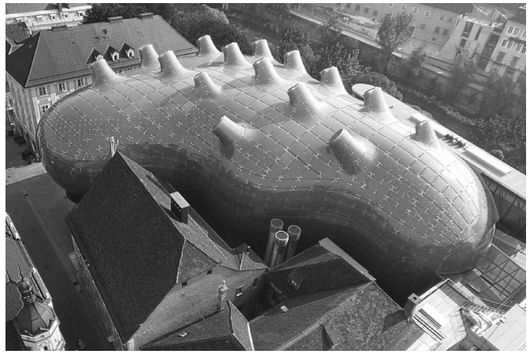

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4.7 Coop Himmelb(l)au, *Ronacher Theatre*, competition for the restructuring of the Ronacher Theatre, 1st prize, Vienna, Austria 1987 © Coop Himmelb(l)au

4.8 Spacelab Cook Fournier, *Kunsthaus Graz*, Graz, Austria 1996, © Zepp-Cam

architectural education generated by the *Model Steiermark*.

Rock over Barock—For the exhibition *Rock over Barock* (2005) at Aedes Berlin, curator Reiner Zettl selected ARTEC Architekten, Urs Bette, Delugan Meissl Associated Architects, Sophie Grell, stiefel kramer, Klaus Stattmann, Tercer Piso Arquitectos, the next ENTERprise Architects and Wolfgang Tschapeller to represent what Kristin Feireiss[20] calls 'a cross-section of Austria's architectural avant-garde'.[21] In the accompanying publication, Wolf D. Prix states: 'These young architects show that for all of their diversity, it is nonetheless possible to discover a distinct quality in Austrian architecture: the architecture of the spatial sequence'.[22] Prix then continues to draw a lineage from the Baroque and Fischer von Erlach to Friedrich Kiesler, Rudolph Schindler, Hans Hollein, Walter Pichler, Raimund Abraham, Guenther Domenig and Coop Himmelb(l)au down to the current younger generation. Despite the accolades, Prix commiserates that the current architectural scene is composed of lone warriors who are unable to unify their voices under an overarching theoretical body, which would 'allow an interpretation and stylisation of the architects' clearly evident qualities in such a way that a sharply contoured image appears of what might make Austrian architects distinguishable in the global scene: namely, the desire to redefine built space'.[23]

While the exhibition focused on Vienna and the context of the University of Applied Arts, I believe that Prix's comments were

also referring to the wider architectural scene, including Graz, Innsbruck and Vorarlberg, as well as the two other architecture schools in Vienna, the Academy of Fine Arts and the Technical University. The architectural scene in Austria includes many different positions that are maintained at a qualitatively high level, which is what makes it so valuable. An attempt at binding them together in one particular school of thought would make the work more recognisable internationally, but may come at a loss in regard to the vividness of its local discourse. Yes, there may be frictional losses, but do they not sharpen the mind of the actors involved? Not according to Prix, who sees their common denominator as 'simply an unruly defiance of tradition, a reflection of Austria's anti-intellectual stance'.[24] I do not share this position but believe to understand where it comes from.[25]

As a consequence of a unified approach, we would possibly miss exchanges such as those between Wolf D. Prix and Dietmar Steiner, at the time Director of the Architekturzentrum Wien, an institution that, similar to the *Houses of Architecture*, was conceived as a centre for exhibitions, events and research into architecture and related topics. Such quarrels, based on profoundly different points of view, prevent the profession from becoming self-referential and congratulatory, and act as a multiplier for the discourse concerning all aspects of architecture. I agree that infighting between different schools of thought may weaken the international representation and recognition, but only if the aim is for competition between different nations. If the interest lies simply in bringing architecture as such forward, disunity can be seen as a resource and breeding ground for outstanding positions. One could suggest that Austria's mountainous rural terrain, where valleys have separated different groups of the population for centuries, has supported the emergence of stubborn individualists who thrive in urban contexts such as Vienna or Graz, where the lack of group pressure and an overarching agenda or protocol have allowed them to cultivate individualistic positions.

There is a certain irony in the fact that Prix, who emerged and worked in a team alongside other architectural groups in the sixties, coined a student cohort of supposedly lone warriors, whose lack of unity he now deplores. The relationship between Prix, Hollein and Holzbauer, and between the master-classes at the Angewandte, where education was focused on the individual's artistic development, was competitive. Collaborative work was the exception, and it has only been recently that I myself have engaged in it. Nevertheless, there is a strong feeling of belonging and community within each class and towards the University as a whole.

Having been based within the avant-garde of Austrian architecture has allowed me to see architecture and art as two closely related fields, whose role it is to question and redefine aesthetic values constantly and further their respective cultural agendas. Architects such as Hans Hollein, Coop Himmelb(l)au and Günther Domenig have shown that

projecting alternative realities (despite the headwind of popular opinion) is part of the architect's role. They have demonstrated that something can be special because it is different, promoting an architecture where the alien, the subjective and the unreasonable are valued for their performative potential and thus positively connoted. Aspiring to this, I have embraced their tools, for example the reliance on physical models, the unpretentious blending of digital and analogue modelling, or the interpretation of abstract material to kick-start the design process. While Prix and Swiczinsky unfold their source of interpretation directly out of themselves, I use an external mediator – spatial material unrelated to myself – through which I try to recognise and extract the expression of my personal spatial intelligence. Both methods aim to establish coherence in the work through the inclusion of the author. In regard to morphology, my work employs a calmer formal language that nevertheless displays an inherent animate quality. Working at Coop Himmelb(l)au established a skills base and conveyed the importance of resilience and persistence that has allowed me to plough through work and successfully finish it. Finally, it gave me first-hand experience and acknowledgement of the unquantifiable and irrational aspects within the design process as well as within architecture itself.

Notes

1. See also Prix, 'Homeland Utopia'.
2. Opera stage set for the *Steirischer Herbst*, a contemporary art festival in Graz, Austria.
3. Kipnis, *A Question of Qualities*, 35.
4. First version shown at Kootz Gallery, New York, 1950. A one-family home version of it was presented at the Visionary Architecture exhibition at MoMA in 1960.
5. Hollein and Weibel, *Hans Hollein*, 35.
6. Hollein and Weibel, *Hans Hollein*, 40.
7. Vienna, 1974–6. Collaboration with Fritz G. Mayer.
8. Feuerstein, 'Visionary Architecture in Austria in the Sixties and Seventies', 52.
9. Hollein and Weibel, *Hans Hollein*, 46 (U. Bette, trans.).
10. Hollein and Weibel, *Hans Hollein*, 111.
11. Feuerstein, *Visionäre Architektur*, 54.
12. Developed during the 1960s. 'Viennese Actionism, considered as a variation of happenings and fluxus, is a school of radical performance art that sought to nullify and loosen the grip of the bourgeois conventions of the post-war years. The movement has become legendary for its extreme violence of expression'. Power, 'Viennese Actionism'.
13. Prix, 'Glücklich ist wer vergisst was nicht mehr zu ändern ist', 24–27 (U. Bette, trans.).
14. Prix, 'Glücklich ist wer vergisst was nicht mehr zu ändern ist', 24–27 (U. Bette, trans.).
15. Prix, 'Glücklich ist wer vergisst was nicht mehr zu ändern ist', 24–27 (U. Bette, trans.).
16. Cook, 'Wien . . .', 7–10 (U. Bette, trans.).
17. Prix, 'The Tougher Architecture', 40.
18. Half of the Viennese housing market is either community funded or subsidised. See Kohlmayer, 'Gestalten', 48–53.
19. Being young upcoming architects at that time, they benefited from a change in the Regional Building and Planning Department, initiated by Wolfdieter Dreibholz, which saw all public buildings and housing schemes bigger than 50 dwellings commissioned through open competitions (on average of 35 per year). The job of the Planning Department, which had previously designed all public buildings itself, was now to run the competitions and support the architects in obtaining all the permissions and permits, which turned it into a political shield for contemporary architecture.
20. Kristin Feireiss is the cofounder of the Architectural Forum Aedes, Berlin, and a former director of the Netherlands Architecture Institute.
21. Feireiss and Commerell, 'When Is the Present', 8.
22. Prix, 'Let's Rock over Barock', 4–6.
23. Prix, 'Let's Rock over Barock', 4–6.
24. Prix, 'Let's Rock over Barock', 4–6.

25. It should be read against the contradictory relationship that Austria has with its greatest minds: 'Vienna's spirit oscillates between extremes of depth and shallowness, between profound humanity and base antipathy. On the one hand, it has nurtured some of Western civilisation's most humane talents, from Wolfgang Amadeus Mozart to Kurt Gödel, but on the other, it is notorious for the animosity it has shown towards the likes of Freud, Oskar Kokoschka, Gustav Mahler, Lise Meitner, Frederick Kiesler, Arnold Schönberg, Elfriede Jelinek, and others, all of whom it today claims with pride'. Kipnis, *A Question of Qualities*, 40.

5.1

Coinage | angewandte

This chapter is an examination of my time at the Angewandte, where students affiliate with a single professor for five years in pursuit of individual artistic development and maturation. The value systems it established were strengthened through my travels in South America, and these experiences are discussed here, providing insights in regard to the influences on my work and the way I teach today.

Master-class—Still working at Coop Himmelb(l)au, I began studying architecture at the Angewandte, the University of Applied Arts Vienna, in the master-class of Professor Wolf D. Prix. The university's broad range of artistic disciplines[1] is organised around a number of professors and their respective master-classes, to which students gain access via an application and examination process. Once accepted, the selected professor becomes the student's primary teacher throughout his/her entire studies. In every other respect, the Angewandte has a traditional set-up, where the design studio sits at the centre of the curriculum, supported by technical and humanistic subjects that surround it. Each master-class consists of one professor, up to four full-time staff and six part-time tutors and around 40 students. Together with other labs and workshops (history and theory, structural engineering, construction, prototyping, printmaking, etc.), this makes for a very favourable student-to-staff ratio and enables cross-disciplinary support and fertilisation. Unlike other architecture schools, where students switch between different professors throughout the duration of their studies, the commitment to one teacher results in them getting to know each student very well. Like a coach in competitive sports, the professor puts the finger where it hurts, and asks students to do what is needed to overcome individual hurdles. This is not always fun, but it is efficient, and because the reference system does not constantly change, it enables students to find and effectively test their bearings.

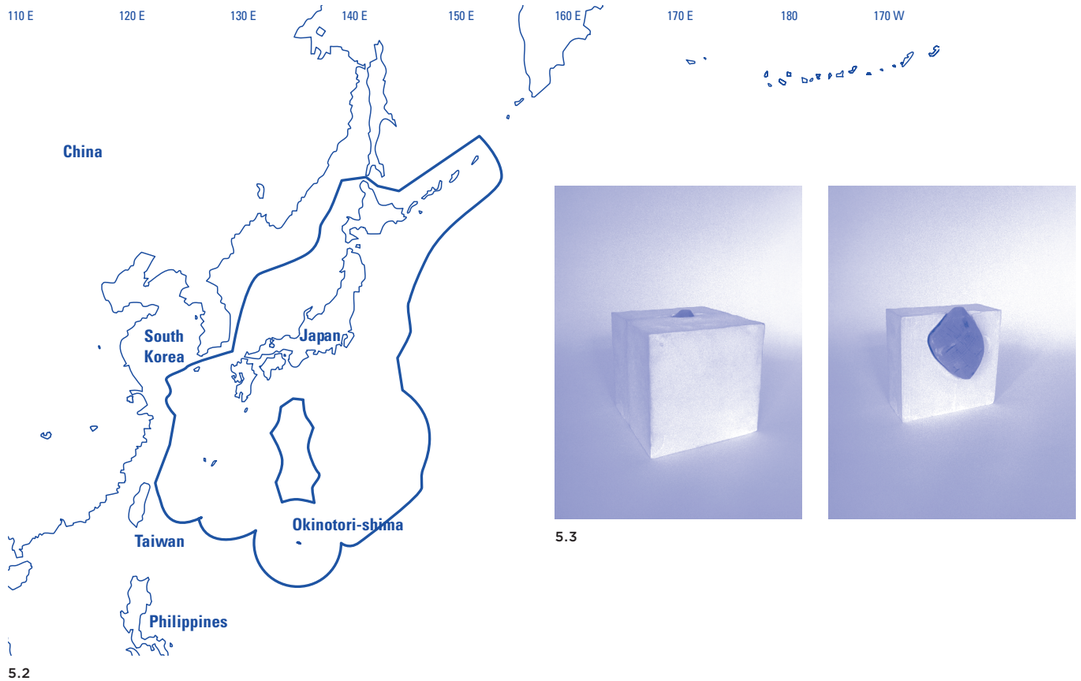
Another unique aspect is the master-class's vertical structure, comprising students from all year levels. Working on similar topics in a shared physical space, yet with individually set expectations, results in an informal mentoring scheme that allows a fluid dispersal of knowledge between students and their varying levels of experience. A culmination of this set-up is the final thesis project, where each graduating student could count on younger classmates to help finalise their work. Hence, in the lead up

5.1 ***The flat as answering-machine***, plaster and EPS model, Vienna, Austria 1997

to my final presentation I led five fellow students who helped me in producing 11 exhibition plates, 900×1,500mm, and three large scale models. The setting emulates an office scenario, where a project leader steers the completion of a submission around the workforce and time available. 'Learning a skill is not primarily founded on verbal teaching but rather on the transference of the skill from the muscles of the teacher directly to the muscles of the apprentice through the act of sensory perception and bodily mimesis'.[2]

The 'studio culture' in the master-class environment is a vital part of its architectural education. Having a space for students to inhabit physically allows them to be surrounded by their work in progress, share the manifestations of their research and acquire skills by emulation. This set-up gives access to what Stuart Kauffmann[3] calls the 'Adjacent Possible', a repository of existing solutions that facilitates their recombination towards the production of new and original knowledge. 'Good ideas are not conjured out of thin air, they are built out of a collection of existing parts . . . some of those parts are conceptual ways of solving problems, or new definitions of what constitutes a problem in the first place. Some of them are, literally, mechanical parts'.[4] All students have their material, models, drawings, texts and so forth on the tables and walls, making topics and discourses visible and accessible. Having parts, ideas and visualisations around at all times speeds up the design process, while the Adjacent Possible constantly changes under the influence of new discoveries.

Emancipation—My thesis project, *The Dragon in the Sea* (2000), came to be the project with which I emancipated myself from my teacher. The task was to save the 17m² island of *Okinotorishima* from erosion and thus secure 400,000 km² of the Japanese exclusive economic zone and, with it, all rights to fishing and mining in this area, yet without touching its natural shoreline. The extreme situation and the surrounding topics, the real and imaginary spaces, the boundary between artificial and natural, and the relationship between architecture and territory, all embedded in a cultural and a legalistic context, made the task interesting and different from anything I had done before. As a solution, I developed the choreography of an annual ritual that reinstated the volcanic origin of the island and its economic life, thus securing the territorial waters for another 600 years. The project mediates different value systems by solving the task in a poetic, yet also technically feasible, way. *The Dragon in the Sea* was different from my previous projects, as form played only a marginal role in its development. Instead, I went on a three-month research odyssey, during which I investigated every factual aspect of the task, from the *United Nations Law of the Sea*[5] and the site's geological characteristics to the economic intentions behind the commission. This dry approach, as well as the small size of the project, was not Prix's cup of tea. Final projects would normally be on a much larger scale and preferably deal with an urban context. However, Prix saw that I was onto something and supported me. My final design solution must



5.2

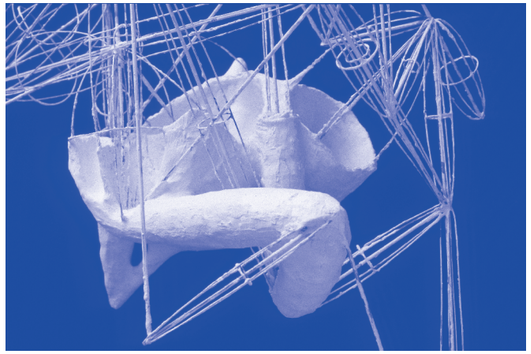
5.3

5.2 ***The Dragon in the Sea*, diagram |** exclusive economic zone, Okinotori-shima, Japan 2000

5.3 ***The Dragon in the Sea*, plaster and timber model |** geological formation of the atoll, Okinotori-shima, Japan 2000

have struck a chord. I finished summa cum laude, had it published in *Arch+*[6], *Rock over Barock*[7], exhibited at the FRAC Centre Orleans and *Reserve der Form*.[8] And although I never did a similar project again, it informed a mode of working that I still apply today – testing the validity and conceptual feasibility of a design through the production of storyboard booklets.[9]

External inputs—The lasting influence of a single professor cannot be denied. It is recognisable in shared ideas and beliefs as well as the traces of a characteristic iconography. However, the Prix master-class did not produce replicas of the master. One needs heroes at the beginning of a career – someone to emulate in order to acquire skills. Yet, over time, one understands that it is one's own responsibility to establish an individual agenda, and at this stage, the master becomes a gauge against which to test this. Working, teaching and learning in the master-class



5.4

5.4 Bette, Stiefel, Wallraff, *Bosch*, wire and plaster model | workshop with Carl Chu on autocatalytic systems, Vienna, Austria 1996

revolves around the development of each student's individual personality and line of inquiry. The fact that many students come in at an older age, often having undertaken previous studies, supports the high level of reflection and self-guidance that is required by students in this setting. It was matched by assistant and associate professors, often recruited from student alumni or staff from the Coop Himmelb(l)au office, who were well versed in Prix's pedagogical aims. External guidance was present as well, for example by affiliated architects such as Eric Owen Moss or Lebbeus Woods, who came in for 10-day workshops. Other inputs came from colleagues who were not closely associated with Prix's community of practice, such as Carl Chu (see the outcome of the workshop; fig. 5.4). This wide array of guests and critics offered different positions that lead to respectful yet at times confrontational discussions, which were an invaluable experience to witness. Another way of including other voices was offered through excursions that the whole class would undertake at the start of each semester. A workshop in Havana, Cuba, and my subsequent travel to Chile were particularly important to me, as they showed that the experimental, poetic and subjective were not just valued within the architectural community around Coop Himmelb(l)au, but relevant in other contexts as well. I point this out because it relates directly to the intent of this research: to validate the irrational and unreasonable in architectural design.

Cuba—The *Escuelas Nacionales de Arte*[10] in Havanna, designed by Vittorio Garatti, Roberto Gottardi and Ricardo Porro in the early sixties, are expressively independent

buildings that gave form to 'the revolutionary passion and utopian optimism of a unique moment, when the Cuban Revolution appeared, as Ricardo Porro has described it, 'mas surrealista que socialista',[11] and part of 'a vision that accepted the subjective and irrational side of reality'.[12] The newly established art schools were supposed to be cultural incubators, different in all aspects, including architecture. An independent cultural identity was one of the major goals of the Cuban Revolution, along with the desire to place education at the centre of its social, economic and cultural programmes. The schools achieved this through interpretation and acknowledgement of Cuba's mixed Afro-Latin American culture, leading to buildings that John A. Loomis describes as an 'other' modernism, whose 'plastic forms emerging from the landscape in Cubanacan were a refutation of the rationalist principles upon which modern architecture rested'.[13] Sadly, these organic sculptural buildings, combining spatial organisation reminiscent of the works by Hugo Häring or Hans Scharoun with a bold representation of tropical life, culture and sensuality, and the artisan crafted Catalan vault as their main construction technique, fell from grace shortly after completion and repudiation set in. Ideologically driven, Cuba began to adopt a Soviet approach to design and construction, whose standardised and replicable character not only represented the economic struggles of the times, but also 'alerts us to the conservatism of power'[14] and the threat that 'free' forms pose to the mainstream. The architects were accused of having built monuments to themselves, blatantly ignoring the fact that these buildings were serving society through their thoughtful response to site, programme and Cuba's ethnically specific culture, not to forget capturing the enthusiasm and joy that marked the early years of the successful revolution through the experiential qualities they provided.

Vittori Garatti's *School of Dance* (1965), now partly overgrown by vegetation, is entirely constructed from brick, making use of the Catalan vault as the construction technique to span a large amphitheatre and seven smaller pavilions. They are connected by loosely overlapping shells that define a meandering circulation with integrated amenities that separate the different programmes without sealing them off or strictly separating the inside from the outside. This allows both the landscape and the space to flow continuously through the buildings, giving the users maximum choices in the ways they move through space and make use of different spatial situations. Giving choices is a quality I have always strived for in my projects, best seen at *Uralla Court*, but one that I seem to have lost in more recent work. What struck me upon visiting was the manner in which the building articulately responds to the existing topography, in particular the small swale that crosses the former golf club, suggesting that it has always been there or that it has grown out of the land. Another compelling aspect is how the building is broken up into individual shells, with gaps between them, through which light and air move in and out, as if it was a natural environment.

5.5

5.5 **Vittorio Garatti, *School of Dance*** | foyer and roofscape, National Schools of Art, Havana, Cuba 1965

I took this up for *Thalia Graz*, where, in an intermediate stage of the design, I sliced the building's skin to create gaps through which light, space and movement were able to flow in.

Chile—Following this excursion into early revolutionary Cuban architecture, I travelled to Chile to visit another idealist project, the *Ciudad Abierta*[15] in Ritoque, north of Valparaiso. The *Open City* was founded in the early seventies by a group of architects, artists, poets, engineers and teachers around Godofredo Ioomi and Alberto Cruz, and is part of the Institute of Architecture at the Catholic University of Valparaiso. The activities of the *Open City* are of interest to me because they reject the primacy of reason, in favour of poetry as a means of discovery and guidance in architectural production. Ann Pendleton-Jullian describes: 'The novelty of the work of the Catholic University of Valparaiso is in the commitment to modern poetry and poetics within the creative and pedagogical processes of architecture and, very specifically, in its commitment to the power of the word and language within these processes'.[16]

In 1971, the Institute of Architecture purchased a 300-hectare site next to the sea, in order to engage in practice research, building experimental yet inhabitable structures at 1:1 scale as part of their curriculum. Pursuing a 'learning by making' agenda is based on the Institute's critical attitude towards abstract knowledge systems, adding subjective poetic experiences and intuition to fuel imagination, discovery and creation. Starting as a research laboratory, the *Open City* has become a community of architects and artists, professors and students, exploring alternative practices of architectural

5.6

5.6 **B. Ivelic, *Hospederia de la Entrada*,** Ciudad Abierta, Ritoque, Chile 1982

production that are based on poetry as a generative tool. Over decades, they established a way of working that revolves around 'returning to not knowing (*volver a no saber*)',[17] rejecting precedents and established modes of best practice to reinvent and progress architecture with every new project. The approach is influenced by modernist French poetry and the surrealist movement around Andre Breton, whose various artistic methodologies – performances, games and travels – aimed at establishing a connection between the rational and the mystic aspects of reality. With reference to Sigmund Freud, they identified the unconscious mind as the portal to an alternative, yet equally valid, truth, using automatic writing, for example, as a means to express thoughts in an unmediated way, bypassing logic, reason and taste. The Mexican writer, Octavio Paz, adds: 'Truth does not proceed from reason, but from poetic perception, that is, from imagination'.[18]

In pursuit of an architecture based on imagination and grounded in the South American continent, Godofredo Iommi, founding member of the *Open City*, conceived its charter: the *Amereida*. It is a poem that describes a way of action and participation, defining values, intentions and approaches. Designing and building, in fact life as such, is understood as a poetic act that originates from within the realm of language. Each project is a journey from mental to physical space that is initiated by a collectively conceived piece of poetry in response to a particular place. The projects' aim is to reflect the character of the place they reside in and conceive the resulting designs as a gift to society. The initial poetic act of each projects is the *travesia* – a journey (originally across the continent) that engages the community

5.7

5.7 M. Casaneuva, ***Nueva Hospedria del Errante*** | south facade with wind-deflecting planes and interior view, Ritoque, Chile 1997

with the land or site. One part of the journey is the *phalene* – the communal conception of poetry that spawns from a particular site, revealing inherent qualities, topics and questions, as well as suggesting future spatial interventions. It is an interpretation of place that joins factual analysis with intuitive discovery. As part of the *travesia*, the *phalene* is transformed into a physical artefact that marks the site, indicating possible locations or structuring larger interventions on site. While the *phalene* expresses space in the form of language, the *travesia* translates language into the third dimension. The first *travesia* was a journey of students and professors across South America, resulting in ephemeral installations along the route. Similar to the wanderings of Breton, the *travesia* is a formalised concept to include chance encounters and spontaneous interventions into the design process. It could be described as an expanded site analysis, in which the designers' mental and physical faculties act as an instrument for surveying, analysing inwards and outwards, subject and object. Importance is placed on the participants' ability to immerse themselves and connect with the land, referencing the manner in which surrealists combined the subjectivity of the author with the factual specificity of a location.

Abstract poetry, free of grammar, stylistic order or desired results, is used to capture the imagination in an unmediated way, admitting 'the illogical and illusive [aspects] of reality into the field of activity'.[19] Instead of using language to elaborate or justify a preconceived conceptual idea, it is used to create the fertile ground for imagination, from which a project might stem. The written output becomes a type of oracle that is interpreted for guidance in the ideation and development process of architectural production, establishing, in fact discovering, questions of form, space

5.8

5.8 M. Casaneuva, ***Nueva Hospedria del Errante***, physical model 1:50, Ritoque, Chile 1997

and phenomena. This is 'poetry, not as the inspiration, which is how it is used by most, but as the indicator [of direction]',[20] says Ioomi. Questions of utility – programme, material, construction, among other aspects – are brought in during the editing process, connecting the intuitive mind with the designers' critical capacities, to formulate a holistic proposal. Projects are never finished. The communal rituals of creation are initiated again and again over time to address upcoming questions in the development of a project, including how to address the changing needs of the inhabitants. Each building is an ongoing endeavour, designed and built in communion, and gradually adapted. Since they are all experimental in structure and detailing, some are more ephemeral, being reclaimed by nature, the sand and the wind, sometimes becoming the source for building material. The layout of the *Open City*, its urban form, 'happens' in a similar way to projects. There is no overall planning that determines the way that buildings, passages and agoras relate to each other. Instead, it is structured, over time, through a field of activity, debated in public forums. Pérez de Arce explains, quoting the school's founder, Alberto Cruz: 'The inaugural ritual is collective and solemn, and "no work is realised without a founding act". The poet officiates as augur, possessing, according to the *Almereida*, "the gift of divining things, of clarifying . . . a way of merging with the land."'[21]

The expressive formal language of the *Open City* is reminiscent of deconstructivism, but since most buildings predate its appearance, it must be seen as a disassociated stream of architectural development. There is a similarity in the design process between my own work, which I will elaborate on in later chapters, and that of the designers at the *Open City*, particularly in expressing the subjective through intuitive action, working with reference to the land,

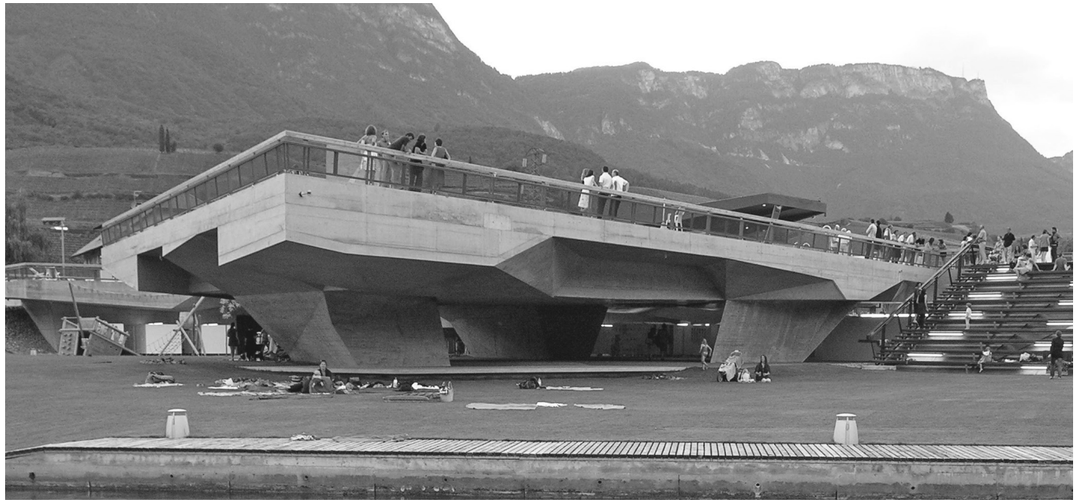
creating an external material context for interpretation. Differences lie in the tools and modes of operation: replacing poetry with physical models as 'poetic' entities, working on my own instead of in communion, adding the concept of an 'idea' that has to make sense outside of my own world to the project outcomes. I am fascinated by the assertiveness with which the community of the *Open City* has established a unique modus operandi, that they are able to maintain within a built environment that is dominated by rationality and architecture seen as commodity. It appears to be an 'island of the blessed', operating in ignorance of outside rules but feeding into the outside world. The influence it appears to have had is evidenced in the self-contained character and internationally acclaimed work of Chilean architects such as Smiljan Radic, Cecilia Puga and Pezo von Ellrichshausen.

The presence of a strong antagonist (teacher) forces the opposite (student) to establish a position. This happens on the basis of skills acquired by emulation and the freedom for individual artistic exploration and development. The physical space of the studio plays an important role in giving access to the Adjacent Possible, the repository of existing solutions that allows creative innovation through the recombination of existing knowledge. This is a situation that I try to emulate in my design process as well as my own teaching. The two streams of education I undertook – visual communication design and architecture – inform my design processes today. Communication design is involved with the public agenda of my projects, where I aim to validate a design by producing a shared frame of reference. My architectural training in Vienna as well as my travels to like-minded communities in South America have promoted an appreciation for the poetic, the subjective and personal agendas embedded in architectural production, and the attendance to form as the path that leads to architecture's core – space. The interplay of these aspects defines the object-related ontology that exists within my work. Both educations and my family background have determined the manner in which I work – a hybrid process that values embodied knowledge as much as analytical understanding.

Notes

1. These include architecture, conservation and restoration, creative writing, fashion, graphic design, fine arts, industrial design, media design, social design, stage design, teacher training and Trans-Art.
2. Pallasmaa, *The Thinking Hand*, 15.
3. Kauffmann, 'The Adjacent Possible'.
4. Johnson, *Where Good Ideas Come From*, 35.
5. United Nations. 'United Nations Convention on the Law of the Sea,' https://www.un.org/depts/los/convention_agreements/texts/unclos/unclos_e.pdf (accessed 15 August 2019).
6. Bette, 'Der Drache im Meer', 126–7.
7. *Rock over Barock: young and beautiful*: 7 + 2, Austrian Architecture at the Aedes Gallery Berlin, 2005, curated by Reiner Zettl.
8. Exhibition at Künstlerhaus, Vienna, curated by K. Stattmann and A. Fitz, Vienna, 2004.
9. I will talk about this in more detail in the chapter Modes | analytic.
10. National Art Schools.
11. Loomis, *A Revolution of Forms*, xxxii.
12. Castro, 'History Will Absolve Me', 158.

13. Loomis, *A Revolution of Forms*, 20.
14. Mosquera, 'Foreword', xxix.
15. *Open City.*
16. Pendleton-Jullian, *Road That Is Not a Road*, 178.
17. Pendleton-Jullian, *Road That Is Not a Road*, 13.
18. Paz, *Bow and Lyre*, 118.
19. Pendleton-Jullian, *Road That Is Not a Road*, 133.
20. Pendleton-Jullian, *Road That Is Not a Road*, 47.
21. Pérez de Arce, Oyarzún and Rispa, *Valparaíso School*, 14.



6.1

6.1 The next ENTERprise Architects, ***Lakeside Pool Caldaro***, Caldaro, Italy 2006

Coinage | mentors

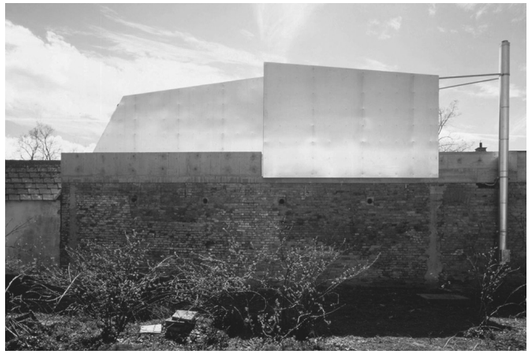
Interrogating the influence that role models have had in the formative years of my practice, I outline the similarities and differences in the methods and values we pursue.

The next ENTERprise Architects— There is a strong solidarity amongst the alumni of the master-classes and the architects affiliated with it. Marie Therese Harnoncourt and Ernst Fuchs of the next ENTERprise Architects (tnE), as well as Klaus Stattmann, had just finished their studies when I started studying at the Angewandte, and later became assistant professors in the master-class. Ernst Fuchs was a role model for us as young students. While still studying, he demonstrated that it was possible to realise a daring design in the most conservative environment, a rural village in Tyrol, Austria, and was able to realise it on a small budget. It bolstered our confidence in the future that *Zirl House* (1997) was designed by a fellow student, whose wit and tenacity outsmarted the council's radar for non-conforming architecture. Fuchs made use of ambiguities in the documentation for building approval, and accepted the risks that come with such an endeavour. For me, *Zirl House* is relevant in terms of its design process, as it derives from reading and interpreting a spatial field of information.

Andreas Ruby[1] writes:

'The necessity of this reading in order to articulate space makes clear that Fuchs is not concerned with banishing the architect's subject from architecture. He simply does not see the architect as creator of form, but similar to French film director, Jean Luc Godard, rather as the "organisateur conscient" of the formation process. As a result of this, Fuchs introduces strategies which are known to modern art and literature, such as the "écriture automatique" of the surrealists or the dadaists' controlled use of chance. In relation to this he understands form as something which is not invented, but rather found: the form as ready-made, that is a form "already made". The main point of design shifts from the pure production of form to its post-production – a development which can be observed in contemporary electronic music and which could gain importance in contemporary architecture as well.'[2]

The use of this technique indicates Fuchs' exposure to Prix's and Coop Himmelb(l)au's design processes. Similar to Fuchs, I also search and find new form.



6.2

6.2 **ARTEC Architekten, *Space Zita Kern*,** Raasdorf, Austria 1998, © Architekturzentrum Wien, Collection, photo: Margherita Spiluttini

Yet, while Fuchs is after the 'objet trouvé' that already defines the final expression of a design, I try to establish a twofold strategy that cherishes the spatial qualities of the found form, while also using it as an intermediate step to trigger a conceptual idea that turns the design into a product. This is achieved by reading the material through different frames of reference in order to establish a performative surplus that is valuable to a wider audience, while along the way the initial form is gradually altered. And rather than 'found', my form is clandestinely projected as I deliberately search for 'my form' within the spatial information that acts as the initial design catalyst. I am a creator of form, who works the chaos of multiple traces/forms offered, a problem deliberately staged, in order to understand gradually what I am actually looking for.

Artec—Bettina Goetz and Richard Manahl from Artec, originally from Vorarlberg and who studied in Graz, have also been generous in sharing their expertise about detailing and implementation with me. Artec's work develops around existing typologies, mainly in housing. They enjoy spinning these further, digging deep into structural and organisational systems, constantly improving an already established concept from one project to the next. I am very fond of their project *Zita Kern Space* (1998), which is one of their more sculptural works. It is a one-off solution, whose beauty lies in the relationship with the existing building and a precise implementation that renders technical aspects invisible. The programme for this project is a space dedicated to writing, executed as an extension to an old farmhouse. The project appears to me as a progression of the *Solar Pavilion* (1962) by A. & P. Smithson. Both projects share an alien appearance in relation to the context with which they collaboratively interact – an aspect that comes up in my work as well. Further, there is the similarity in material – a raw aluminium cladding that contrasts with the warm colour of the brick below. Both designs are compact and

6.3

6.3 **Wolfgang Tschapeller, *St Joseph residence*,** Lower Austria, Austria 2007, © Lukas Schaller

minimalistic enclosures. Yet, while the *Zita Kern Space* is a sculpturally faceted form, the *Solar Pavilion* remains a box. I can relate to a reduced formal vocabulary, as long as the project can still maintain its spatial effects. Trying to implement an idea with the least amount of formal agitation is evident in nearly all of my projects, such as in *Uralla Court II* (2006), *AN house* (2009) and the *EAF extension* (2009). In comparison, the work of the tnE is often rich in geometric agitation[3] that I deem superfluous to the spatial result and would thus eliminate. We share similar ways of commencing a project. Yet, while tnE try to carry the formal richness of the design genesis through to the architectural object,[4] it is my intent to reduce formal complexity towards its geometric essence.

Wolfgang Tschapeller—Another colleague who is part of my community of practice is Wolfgang Tschapeller. He is a meticulous observer, who develops ideas from everyday scenarios and transposes them into a new context. For example, his interpretation of a photograph that his mobile accidentally took, lying in a plastic bag together with a book he had just bought,[5] became a serendipitous finding, which served as the spatial point of departure for the *Bauhaus Europa* (2006) project and the *St Joseph Residence* (2007). Furthermore, since the book was a catalogue on the work of video artist Dan Graham, he started contemplating about the segregation of the body and the built environment, and turned this into a theme for the Austrian Pavilion at the Venice Biennale in 2012,[6] which he curated.

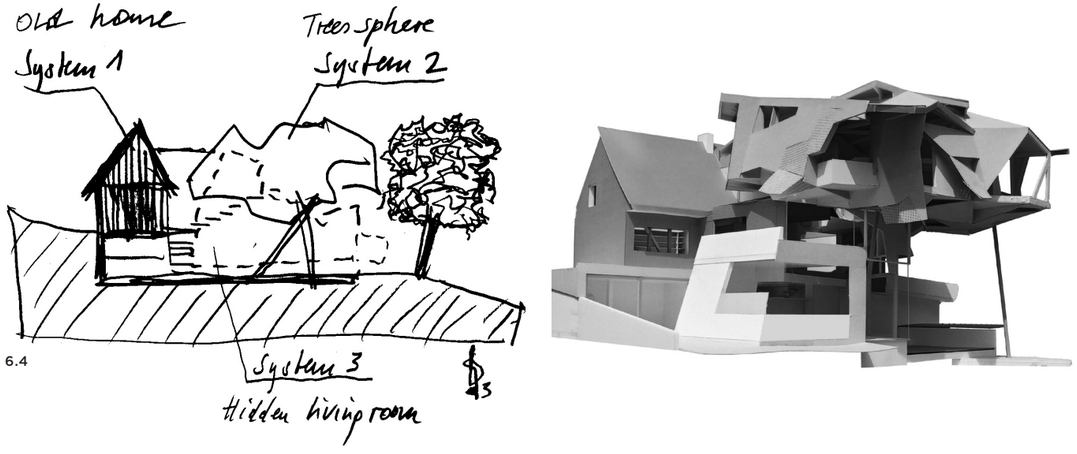
Similarities to my work exist in two areas. One is taking notice of serendipitous accidents, allowing them to inform a project by analysing their value under the light of a specific frame of reference. One example of this is when I identify existing air-conditioning units as a potential driver for the *EAF extension* project. A second feature is the building elevated above the ground. The project *Centre for the Promotion of Science* hovers 20 metres above the ground. Tschapeller does not want the building to claim the land it sits on but rather to make it accessible to all.

This relates to a Coop Himmelb(l)au statement from 1968: 'Our architecture has no physical ground plan, but a psychic one'.[7] Jeffrey Kipnis explains that:

'disestablishing unwanted authority in a building has evolved into a far more complex issue, one that confronts not only the feudal regime of the ground, but the regulatory regime of the plan . . . Speculative architects today attempt to design buildings that detach not just the body, but the existential being of its subjects from the ground plan, transporting her or him elsewhere . . . [Coop Himmelb(l)au] attempts to accomplish the transport by using immediate experience.'[8]

At the *Centre for the Promotion of Science*, and similarly the *St Joseph Residence*, Tschapeller literally erases the ground plane and completely detaches the building from it. Elevating a volume above the ground is evident in my work as well. Yet, in my projects, the terrain transforms and becomes a sculpted part of the whole design. Two projects that deal specifically with an existing ground condition are *Uralla Court* and *Uralla Court II*. Yet, while the two Tschapeller projects do not relate to the ground at all, leaving it completely untouched, my aim is to activate the ground by expressing its specific characteristics and have it establish a performative relationship with the architecture. Instead of creating a level field, allowing all to roam freely, the ground itself establishes its authority and organises the space.

A unique aspect in Tschapeller's work is the way in which he handles models. He has a background in furniture making, which is evident in the meticulously crafted models and the way he values their material qualities. His physical models are like small sculptures, made from timber or cast in plaster. I never saw a working model of his, which makes me believe that his ideation process is steered purely by abstract intellectual analysis. Only once an idea has been nailed does he put it into form. He uses models to verify an idea and communicate it to his audiences. The models are three-dimensional diagrams, whose aesthetic strength lies in their striking relationship to a conceptual idea, allowing the quality of the idea to be felt rather than known. It is apparent that his models embody the knowledge that went into the conception of a design, which thus does not need to be explained verbally in order to be understood. I envy the attention he puts into the production of these objects, but I also see the danger in losing focus of the architectural idea by falling in love with the material qualities of an object; at least, this could happen to me. In contrast, I use



6.4

6.4 Klaus Stattmann and Ernst J. Fuchs, *Kinsky House*, concept sketch and physical model, Vienna, Austria 2000, © Klaus Stattmann

models as a generative tool within the ideation process. An idea is co-produced by the handling of material processes and observing the phenomena that they produce, both lying outside of my conscious planning. While Tschapeller appears to verify an idea through models, I do this on a graphic level, through producing storyboard booklets that accompany the design and the production of working models.

Klaus Stattmann—Klaus Stattmann was a classmate and tutor with whom I shared an office space after graduating. His design research revolves around questions of disguise, deception and mimicry in the natural environment, which he transposes into the semiotic realm of architecture. His work explores the ambiguity of form and its potential to incorporate multiple readings, depending on the observer and his cultural frame of reference, aiming to play with raising and misguiding culturally denoted expectations. His architecture draws its interest by belonging to multiple reference systems at the same time. It can be 'as well as', and therefore embodies multiple readings and an enigmatic quality. Experiencing the various possible readings requires the investment of time and 'moving through' different phases of recognition. *Kinsky House* (2002), developed in collaboration with Ernst Fuchs, is an example of disguise on different levels.

'The existing ensemble/system "old house + orchard" is supplemented by a mimetic architectural sculpture in the form of an artificial tree sphere, which only discloses itself when one looks at it more closely. The proportions of the old house are retained; the orchard is extended by a habitable tree sphere. In terms of its structural elements, the building consists of three systems: the "old house", with traditional spatial organization; the "tree

6.5

6.5 Klaus Stattmann and Ernst J. Fuchs, *Kinsky House*, Hochgschaid, Austria 2002, © Klaus Stattmann

sphere", as a complicated, yet-to-be-conquered landscape with unspecified uses; and the "hidden living room" between the existing garden surface and the tree sphere. In the "house-landscape" system, the artificial treetop, from afar, forms a supplement to the orchard system (tree in relation to tree) and is thus an expected component, being a constitutive element of the surrounding landscape. It is only when one comes closer and crosses the identificational [*sic*] boundary that the tree transforms itself into a house; nature becomes culture.'[9]

Stattmann's ideas are produced through abstract intellectual discussions. Once a conceptual approach is found, it is rigorously implemented in a design process that is unfazed by an aesthetic canon, resulting in a range of formal expressions that can appear unsightly, not to say ugly, at times. He does not care for beauty or ugliness, since he is solely focused on the conceptual idea that is inherent to the project. He clearly values the 'content', the intellectualisation, of the design process over the project's 'appearance'. This position is shared by the prevalent architectural discourses, in which cerebral authority frowns upon the subjectivity, emotion and aesthetic values that are expressed in architectural work. In contrast to this position, part of my research is about splicing together the different value systems and producing work in which 'content' and 'form' coalesce, where form has 'the power to synthesise values, poetics, pragmatic constraints and overbearing cultural issues, and at the same time cohere to the construct of the architectural design'.[10] Mauro Baracco once shared his observation that within Melbourne's architectural context 'there is a culture of thinking that ugly is better', concluding that 'this is exactly the same as saying that pretty is better, exactly the same',[11] Referring to the 'ugly' can be a strategy to evade accusations of formalism, when personal formal preferences are effectively cloaked by their difference to the aesthetic mainstream. It is assumed that there must be 'content', as one cannot actually want 'this' otherwise.

Ian McDougall—Jumping 10 years forward, teaching alongside Ian McDougall[12] had a much-valued impact on my work. Initially, I had little sympathy for ARM's work, which was mainly due to media discussions in Europe around the alleged plagiarism of Daniel Libeskind's work for their design of the *National Museum of Australia* (2001) in Canberra. ARM are interested in the pursuit of unique investigations that manifest through form. Their ideas revolve around visual and spatial surprise

6.6

6.6 ARM Architecture, *Elwood House*, Melbourne, Australia 2017, © John Gollings

that is generated from historical and cultural contexts. These contexts are often found in the vernacular, not shying away from the 'ugly' Australian suburb. ARM engage in experimentation from concept development onwards through to building implementation, embracing and challenging the generally risk-averse architectural procurement methods and thus expanding the tools of our discipline.

I believe that Ian's success lies in resisting what historian Michael Dobbs described as 'the tyranny of conventional wisdom'[13] that confines us to the way that things ought to be done, the presumably mandatory protocols of professionalism. By contrast, Ian is driven by questions such as 'I wonder what would happen if . . .'. Being able to let go of predefined aesthetics and commonly sanctioned processes is an

expression of maturity and independency from external judgement. Of course, there will always be mistakes made – wrong turns and subsequent changes of direction – but Ian shows the value of taking a risk. It is not comfortable or easy, but it is extremely exciting. This excitement and passion for architecture is contagious, and that is why it is so important for people like Ian to teach and inspire the people around him. Ian has an amazing ability to think a project through someone else's mind while also reflecting upon his own observations and being aware of the blind spots they entail. Sharing those blind spots in discussions with our students led to quite humorous situations, where we would pre-empt each other's judgements by arguing a project through one another's perspective. The students came to witness that in architecture many possible solutions are equally valid. I have seen many students who were taken by surprise when Ian took their mildly unusual proposals and amplified them to a level that they never thought would be possible. What comes into play here is that Ian is also entirely grounded in the day-to-day practice, knowing the nuts and bolts of the profession, coalescing theory and research with practice. He is therefore able to instil a confidence that enables students to leap into the void, to realise that architecture can be 'serious play'.

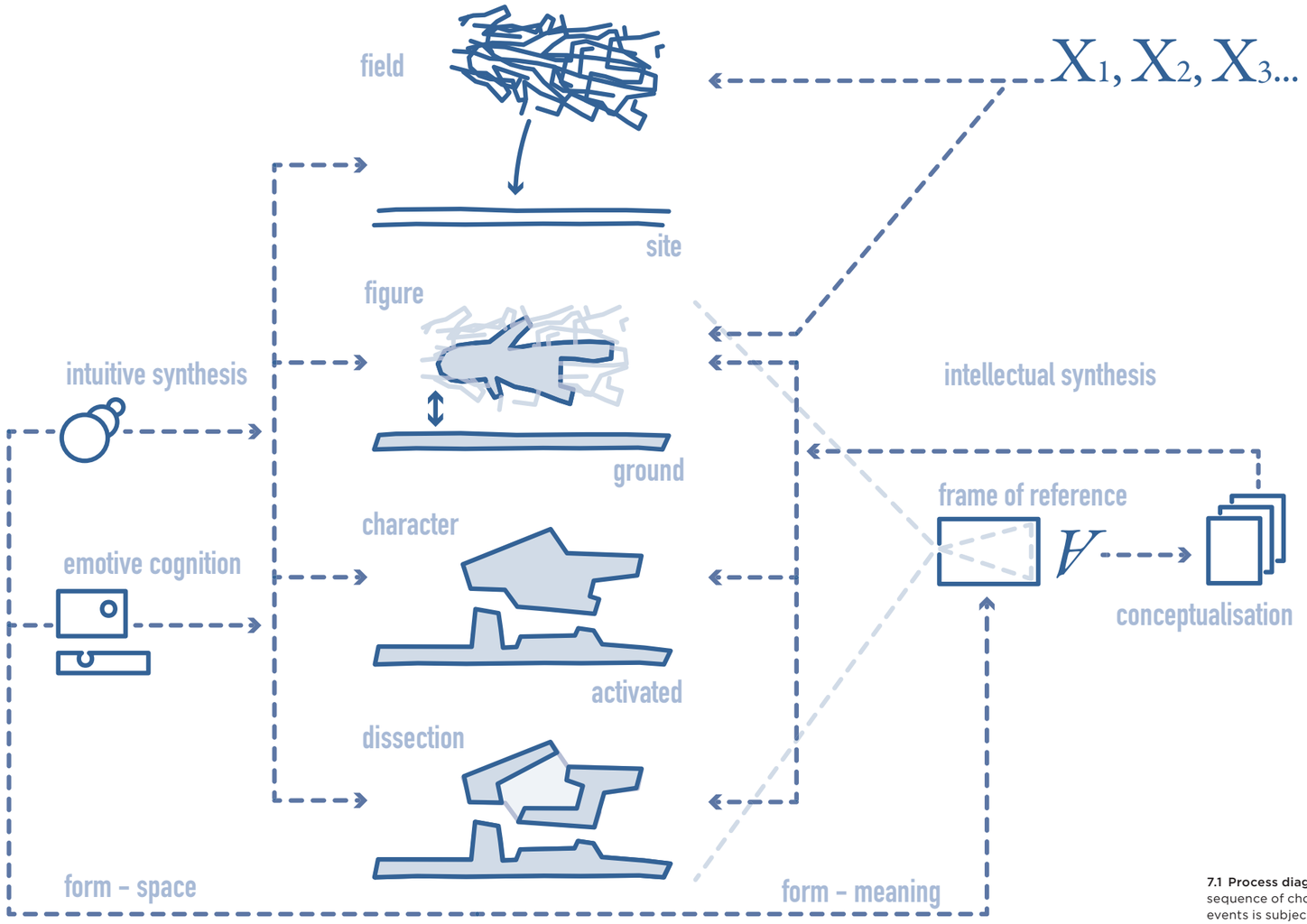
Despite the explorative nature of my Viennese background, there are strategies in ARM's repertoire – such as taking a very literal approach – that challenged me, mainly because I was afraid of ugliness. One of Ian's recurring goads is 'A bad idea – is a good idea' (if pursued radically). The value of this illogical provocation reveals itself by being both unreasonably serious about outrageous proposals and, at the same time, profoundly grounded in cultural references. Experiencing Ian's open-minded approach encouraged me not to take myself too seriously. For example, the conversion of a knot of pipes into a function centre, which I explored for the *Wien Gas* (2013) competition, would not have happened without his influence. Before, I would have deemed such an idea as too literal. Now, it opened up a whole new area of investigation for me.

Form matters—Not so much what it looks like, but rather what it induces in me. Form is architecture's language. Everything that architecture itself can achieve, it achieves through the user's response to form, what they 'feel' when experiencing a building one on one, unmediated. It is gratifying to hear Stephen Neille confirming this when he notes that my exhibition piece at the RMIT Design Hub 'speaks for itself, embodying the argument and charging the room with spatial energy to demonstrate what words could only promise'.[14] Being able to induce an experience and communicate an investigation through physical work is what I am aiming for. This leads to questions of semiotics. Since the aesthetic value system I bring to a project is based on a cultural heritage that I share with others, there is a good chance that my architectural signifiers, my formal language, can evoke similar connotations in the people experiencing the work as they do in me. I distinguish between my own agendas within a project and those of the client or public. In the process of designing, I base my decisions on an emotional response. It is a feeling of joy that guides my formal preferences, telling me where to proceed or halt. Later, in the process of 'selling' the work, before it has been built, I intellectually anticipate the visual 'reading' of the work in the presentation and make sure to highlight relevant signifiers to steer the audience's perception. These 'signs' cannot be added in hindsight if they are not embedded within the project itself. I believe that a coherent conceptual idea is reflected in a form, and that things that 'are' right will actually 'look' right. Beauty and aesthetics cannot be applied from the outside, but rather they 'grow' from within, and their signifiers are an integral part of a project's 'being'. Depending on the cultural background and personal upbringing of the 'reader', the notion of 'right' (or wrong) may be described as beauty or ugliness, depending on the perspective. In any case, it is the application of a value system, conscious or unconscious, overt or concealed. Being able to sense right or wrong in designs is often described as 'having an eye' for aesthetics. It relies on the acceptance of intuition and the integration of the 'self' in the design process.

By sharing values and techniques, actual and imagined mentors have enabled me to set the basis for my individual advancement. I appropriated and further developed: the introduction of chance operations to challenge my spatial intelligence and extract 'my' form – valuing form for both its experiential qualities and as a carrier of meaning; the appreciation of bodily experiences as a means to assessing a design (in the design process as well as the final work); and the borrowing of formal and semantic clues from different contexts, putting them to use for what they were not originally intended. Despite the common coinage of a sculptural Austrian tradition, conveyed by a strong teacher, different modes of working and aesthetics have developed in each practice. At the same time, the shared background has forged a strong community to which I belong. Being part of a community entails that one takes up a particular role or is ascribed to one. Coming to Australia has enabled me to reposition myself. It allowed me to explore alleys that beforehand were considered no-go areas, and which subsequently became the basis of further exploration and development.

Notes

1. Publisher and director of the Swiss Architecture Museum.
2. Ruby, 'Espace Trouvé', 137.
3. See *Lakeside Pool Caldaro*, Caldaro, Italy.
4. In that sense, staying true with Coop Himmelb(l)au's 'vow to will the psychogram into building without simplification', Kipnis, *A Question of Qualities*, 50.
5. Tschapeller, 'Einige Projekte'.
6. Tschapeller, Ritter, and Jauernick, *Hands Have No Tears to Flow*.
7. Prix, Kandeler-Fritsch and Kramer, *Get Off of My Cloud*, 25.
8. Kipnis, 'Against Two Gravities', 14–9.
9. Stattmann, *Kinsky House*.
10. Reisner and Watson, *Architecture and Beauty*, 25.
11. During my fifth Practice Research Symposium presentation at RMIT.
12. Founding director of ARM Architecture.
13. Dobbs. *One Minute to Midnight*, 175.
14. Examiner's report of my PhD, 24 November 2014.



7.1

7.1 Process diagram | a central sequence of choreographed events is subjected to two different modes of interrogation and assessment, Melbourne, Australia 2014

Modes | unreasonable

This chapter interrogates how different instances of unreasonable thoughts, events and behaviours can positively contribute to the formation of intentional work, in both art and architecture. The reasonable aspects of architecture – purpose, meaning, structure and material – are not abandoned, but rather they are introduced as a second step in the formation of a holistic product, thereby showing how to link an artistic context of discovery productively with a consensus-based approach of justification.

Architecture as poetry—In the seminal exhibition *Architecture*[1] (1963) at Galerie St Stephan, Hans Hollein argues that architecture is not the materialisation of its function but rather the transformation of an idea through the act of building:

'Architecture is without purpose. What we build will find its usefulness. Form does not follow function. Form does not originate by itself. It is the great decision of man to make a building into a cube, a pyramid or a sphere . . . we are building what we want, making an architecture that is not determined by technique, but that uses technique – pure, absolute architecture.'[2]

Hollein's critique on a simplified reading of modernity is an articulate acknowledgement and endorsement of the poetic and spiritual qualities within architecture. In his pamphlets, he argues that architects choose an easy way out, avoiding their responsibility as creators if they base their design decisions on quantifiable equations of functional performance. For him, a building becomes architecture when it expresses the human need to create objects that transcend their applicability. His comments are still valid today, as it is much easier to gain acceptance for a design if it can deliver a genealogy that exists within the realm of reason and evidence-based performance than it is to argue for the unquantifiable and experiential qualities of space. Sensing these qualities happens in an intimate dialogue between the designer and the objects he or she creates. It is determined by our past experiences as much as our awareness of the present. Thus, the perception of space is a highly subjective matter that registers as feelings that we later translate into more objective terms in order to be communicated.

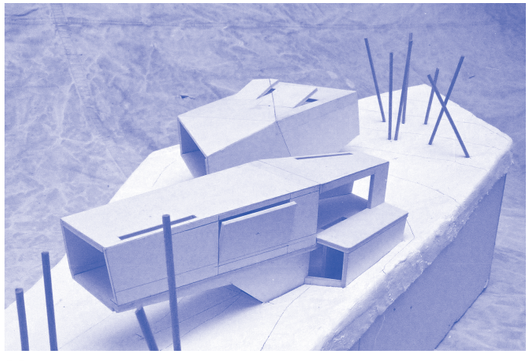
Instances of the unreasonable—Giving room to the subjective was not uncommon in my architectural upbringing in Austria.

As a result, different instances of 'unreasonableness' appear in my work. However, in a wider context, in an architectural environment dominated by expectations of efficiency, quantifiable performance and control, the concept of objectivity is upheld. Thus, despite personal processes playing a major role in establishing my designs, I have veiled these when speaking about my work, and have instead presented more easily understandable causal relationships. I believe that most designers do this to a certain extent. The question is whether a more inclusive approach, acknowledging the personal and subjective in decision making, would also be beneficial to 'rationally' driven industries and minds. Ultimately, we are all searching for ideas, and what counts are those types of environments that foster the emergence of ideas. I believe that innovations develop within interstices, in the overlapping and hybridising, in a place where things are undefined and decisions on their purpose and meaning can still be made. In this regard, one of Heinz von Foerster's core statements comes to mind: 'Only those questions that are in principle undecidable, we can decide'.[3] What if architecture deals with those 'undecidable' questions? Questions for which there are no right or wrong answers. Designers can benefit from this assumption by having the freedom to make choices and not being pre-emptively controlled by established relationships. Despite coming from the technical background of cybernetics, concerned with the understanding of self-regulatory systems, von Foerster comes to a similar conclusion as Hans Hollein; that the idea of 'objectivity' can often be used to evade the responsibility of making one's own decisions and in doing so closes off whole areas of exploration. Von Foerster:

'Simply because the decidable questions are already decided by the choice of the framework in which they are asked, and by the choice of rules of how to connect what we call "the question" with what we may take for an "answer." In some cases it may go fast, in others it may take a long, long time, but ultimately we will arrive, after a sequence of compelling logical steps, at an irrefutable answer: a definite Yes, or a definite No. But we are under no compulsion, not even under that of logic, when we decide upon in principle undecidable questions. There is no external necessity that forces us to answer such questions one way or another. We are free! The complement to necessity is not chance, it is choice! We can choose who we wish to become when we have decided on in principle undecidable questions. This is the good news, American journalists would say. Now comes the bad news. With this freedom of choice we are now responsible for whatever we choose!'[4]

Process—Investigating the manner in which I work, while reflecting on my historically developed spatial intelligence, has revealed the blueprint of a design process that values the indeterminate and experimentation as a mode of enquiry. A central sequence of choreographed events leads the project's genesis in conjunction with two parallel modes of assessment: one subjective, the other rational (see fig. 7.1). Most projects start with a chance-driven process

7.2



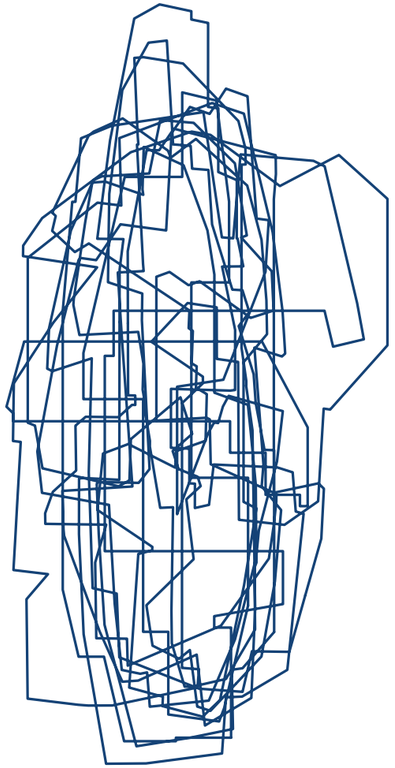
7.3

7.2 ***Uralla Court*, sketch model** | a found sponge jump-starts the design process, South Australia 2004

7.3 ***Uralla Court*, working model 1:100**, South Australia 2004

that generates a spatial field of information. Alternatively, the point of departure can be an initially arbitrary found object whose potential may only reveal itself over time. The spatial field is then examined with the intent to extract a concise figure. Hereafter, the figure engages in a dialogue with the site. Figure and ground then negotiate the essential quality of the project: space. The project's morphological and experiential qualities are assessed by intuitive synthesis, while an analytical point of view is taken to assume the project's perception from an outside observer and process it on a semantic level. I will address the different forms of unreasonableness in my work in the chapters on 'modes' as well as 'agents'. Further, I will show the benefit of 'suspending one's disbelief' and the iterative switch between unreasonable and rational processes in the works of selected artists and architects, and show how, decades later, their methodologies are being 'scientifically' confirmed by current developments in neurophysiology.

Unreasonableness in art—Different kinds of chance operations have been used as a catalyst in art and architectural practices in both past and present. Their aim is to produce material not controlled by the author and thus actively suspend pre-emptive judgement and personal preferences in order to arrive at genuinely new propositions. Kenny Verbeek notes: 'Designs need to make sense, who can argue that? However, designs only need to make sense at the end of the ride'.[5] Aiming for reason in each step, particularly at the beginning of the design process, can be counterproductive, as it keeps the designer within the corridors of existing solutions and expectations. Instead, allowing unreasonable behaviours to question conventional wisdom helps in establishing novel connections between seemingly unrelated fields of knowledge.



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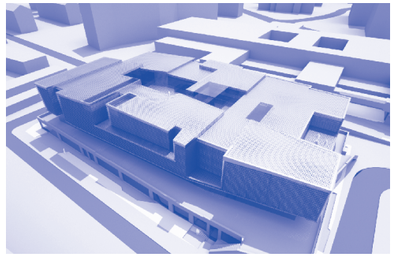


7.5

7.4 Sam/Ott-Reinisch and Bette, *WIFI St Pölten* | traces of earlier projects are used as a generative device, St Pölten, Austria 2011

7.5 Sam/Ott-Reinisch and Bette, *WIFI St Pölten* | St Pölten, Austria 2011

The unreasonable acts as a fertile ground from which a conceptual idea can stem in an attempt to read and analyse its potential.

Chance operations have a long history in the visual and performing arts. Influenced by Sigmund Freud's psychoanalysis, the Dadaists and surrealists developed various artistic methods in order to free the mind from predispositions engrained in existing visual culture and personal taste. The conscious mind's rational judgement, logic and morality were perceived as limiting the artist's imagination. Instead, they identified the unconscious as an unspoiled source of artistic production, which they aimed to tap into directly through techniques that circumvented reason and control. In his *Manifestoes of Surrealism*, André Breton writes:

'We are still living under the reign of logic: this, of course, is what I have been driving at. But in this day and age logical methods are applicable only to solving problems of secondary interest. The absolute rationalism that is still in vogue allows us to consider only facts relating directly to our

experience . . . Under the pretense of civilisation and progress, we have managed to banish from the mind everything that may rightly or wrongly be termed superstition, or fancy; forbidden is any kind of search for truth which is not in conformance with accepted practices.'[6]

André Breton does not reject logic and reason as a whole but aims for a holistic conception of the world that unifies the poetic and the factual and is communicated through artistic expression: 'I believe in the future resolution of these two states, dream and reality, which are seemingly so contradictory, into a kind of absolute reality, a surreality, if one may so speak'.[7] He defines surrealism in short as: 'Psychic automatism in its pure state, by which one proposes to express – verbally, by means of the written word, or in any other manner – the actual functioning of thought. Dictated by the thought, in the absence of any control exercised by reason, exempt from any aesthetic or moral concern'.[8]

Breton lays out the principles of surrealist life and behaviour, coining 'psychic automatism' as an umbrella term for both 'automatic writing' and 'drawing', and gives directives for their implementation. Amongst other practices, Breton encourages his colleagues to walk the streets unintentionally and to note down rapidly anything that crosses their mind, making sure to abstain from correcting, retouching or starting over again. Similar notations should be taken at the edge of falling asleep. The fast flow of words, or images, is supposed to suppress cognitive ambition and express a sort of meta-truth instead. One of the most recognised surrealist games is *Cadavre exquis*. Here, a group of people create a work together by sequentially adding graphic fragments to a drawing, without knowing what the previous people have done before. At the end, the canvas is unfolded; a final figure emerges and becomes the subject of interpretation. This is the moment that content and meaning are assigned. While the results of *psychic automatism* appear to lack structure and logic on initial observation, they are not random or devoid of causality. In the context of Freud's understanding, these unrestricted expressions, similar to slips of the tongue, give evidence of the artist's personal experiences and desires. The artist's unconscious mind is expressed through their own hands and eyes while being augmented by chance encounters with their environment.

Dubious of the inclusion of subjectivity, Max Ernst tried to reduce the artist's influence by using techniques such as frottage (capturing surface structures on paper by rubbing them with a pencil) or collage, where the artist's hand is less involved. However, while the individual's expression is reduced, the act of selection still links the work with the author. Marcel Duchamp had already taken this direction further by devising a conceptual approach in which the artistic act is described and then executed by someone else than the artist, accepting the outcome of a process 'as is', thus eliminating not only the artist's hand and eye, but also the selection process. In the production of *Three Standard Stoppages* (1913–14), he drops three one-metre-long threads from

7.6 Margit Brünner, *Apfelmaschine for Sepp Holzer*, installation: sticks, tape, pink chalk, elastic string and pomegranates | part of the exhibition 'Spinoza's Cabinet', Adelaide, Australia 2012

7.6

a height of one metre onto the floor, and then uses the resulting arbitrary shapes as a template for three timber rulers that question the orthogonal logic of standard measurements. Duchamp writes: 'I couldn't go into haphazard drawing or . . . the splashing of the paint. I wanted to go back to a completely dry drawing, a dry conception of art. I was beginning to appreciate the exactness of precision, and the importance of chance'.[9] While Duchamp relinquishes control in the process of production and assigns 'chance' the role of co-author, what remains is the inevitable degree of authorship that lies in conceiving the idea and setting up the experiment. It appears that evading authorship is harder than expected, if not impossible, that is, unless one accepts Roland Barthes' position, who in 'The Death of the Author' rejects the concept of authorship altogether, writing: 'Surrealism . . . contributed to the desacrilization of the image of the Author by ceaselessly recommending the abrupt disappointment of expectations of meaning (the famous surrealist "jolt"), by entrusting the hand with the task of writing as quickly as possible what the head itself is unaware of (automatic writing)',[10] and he continues:

'We know now that a text is not a line of words releasing a single "theological" meaning (the "message" of the Author-God) but a multidimensional source in which a variety of writings, none of them original, blend and clash. The text is a tissue of quotations drawn from the innumerable centres of culture . . . but there is one place where this multiplicity is focused and that place is the reader, . . . The reader is the space on which all the quotations that make up a writing are inscribed without any of them being lost; a text's unity lies not in its origin but in its destination.'[11]

With this 'reading', Barthes liberates the discourse around artistic production from the notion of a single truth to be replaced by individual constructions of truth, all equally valid. Similarly, Umberto Eco describes that texts 'can not only be freely interpreted but also cooperatively generated by the addressee', and relates this to music, where the interpretation of a composer's instructions by the performing artist is a recognised means to create different readings of the same material.[12] Interesting to me are those moments and forms of interpretation where the artist becomes the reader of his own text, where he not only frames the outcomes of a generative process but also works through it again and again in order to enhance or suppress specific qualities, creating alternative readings along the way. Hans Arp used to drop sheets of paper onto the floor to achieve unplanned compositions. In contrast to Duchamp, Arp used chance experiments to produce a point of departure rather than an end result, looking for formal suggestions that he would either select, dismiss or alter, thus bringing the author back into the equation. This methodological approach recognises the main paradigm of second-order cybernetics: that the observer is always part of the observed. Ranulph Glanville describes:

'Consider, for a moment, how science is carried out. . . . In a scientific experiment, the observer first sets up the experiment

in a manner he chooses. He then carries out the experiment, changing and adjusting until he achieves behaviours of the sort he is looking for. Then he modifies what happens so he gets still more behaviours appropriate to his interests. Then he stops. Remember how we set up and then manoeuvre the lens, screen, and light source in classical optical experiments. We do not just place these elements down on the rule. We move them to get the result we want. Carrying out the experiment, the experimenter was actively involved in both its design and operation. The conventional account omits all this, talking as if somehow, by magic, "everything just happened". There was no adjustment, no design, no intervention, no interpretation of measurement and reading (and no interpretation or ideas). . . . Second-order cybernetics presents a paradigm in which the observer is circularly involved with / connected to the observed. The observer is no longer neutral and detached, and what is considered is not the observed, but the observing system. . . . In this sense, every observation is autobiographical.'[13]

He continues that subsequently any scientific descriptions should be written in the first person, not the third, to acknowledge the presence and involvement of the observer. While Duchamp's chance experiments suggest a scientific 'hands-off' approach to observation, Hans Arp addresses the circularity of the system, allowing chance to break into and disturb personal preferences without suggesting they could be entirely eliminated. What happens here is the augmentation of one system (the author) with another (fabricated chance) to create an expanded field of unforeseeable combinations. Pepe Karmel[14] unveils this methodology in the work of Jackson Pollock when analysing photographs and films made by Hans Namuth that document the production of the paintings *Autumn Rhythm* (1950) and *Number 27* (1950) over a period of several days. Karmel shows that what appears to be an unordered explosion of strokes and lines is in fact the result of a sequential layering process that accentuates and masks figurative elements. The close examination of sequential photographs proves that Pollock starts with abstract figurative gestures, which are subsequently submerged and hidden in a graphic field of information, which he creates by applying secondary layers of thrown and dripped paint. In a follow-up step, he then selects those areas that contain the initial figurative elements to enhance or suppress individual motives. Looking at the finished state of *Number 27* or *Autumn Rhythm*, one would not be able to spot the figures without the help of the footage that documented their genesis. Interesting for me is that unlike other artists who borrow their inspiration from external fields, Pollock creates the material for interpretation himself.

For *Open House* (1983), Wolf D. Prix and Helmut Swiczinsky acted in similar ways. With eyes shut, they produced a set of drawings that aimed to capture the envisioned emotion of the project while trying to avoid concrete visual references. This initial drawing or psychogram that the architects extracted 'out of themselves' acts as the foundation of the project. From

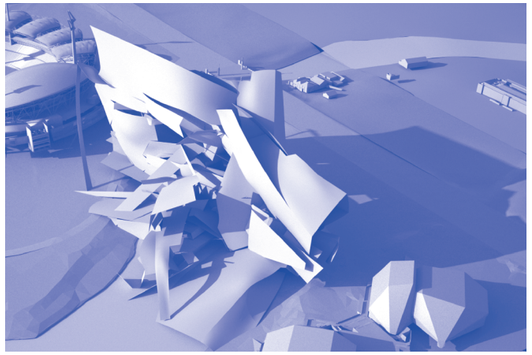
7.7 Working on *Autumn Rhythm*, Jackson Pollock, 1950, photograph by Hans Namuth (detail), © 1991 Hans Namuth Estate, Courtesy Center for Creative Photography

7.7

here, all other drawings and interpretations unfold in an attempt to carry the emotional content through to the finished building. Far from being a product of chance, the direct and open expression of personal content in drawings, and in subsequent models, was profoundly 'unreasonable' for the architectural profession at the time, as it is today, in that it is in direct contrast to the aim of cultivating architects as rational service providers that objectively handle a commodity rather than a cultural, let alone personal, surplus. Coop Himmelb(l)au write: 'We cannot prove it, but we strongly surmise that the more intensely the design is experienced by the designer, the better the experience of the built space'.[15]

For Coop Himmelb(l)au, drawings and models are not illustrations of the design process, but rather a mode of research that enables them to 'handle' the tacit knowledge embedded in the project and make immediate decisions that 'arise "biologically" from un-conceptualised and lived existential knowledge rather than from mere analysis and intellect'.[16] Prix and Swiczinsky unfold the project's point of departure directly out of themselves, translating their subconscious into a graspable format that, in the studio environment, they then pass on to others for translation and refinement while still keeping oversight and control. I will later show how I take a different route, using external mediators as a canvas to access and express my spatial intelligence. Both approaches search for a truth that rests within the author and expresses itself in the coherence of the work.

Role of the unreasonable—The problem that interests me is how to conceive and balance a system that couples new suggestions, extracted from unreasonable behaviours, with the spatial intelligence of an author, while aiming to produce



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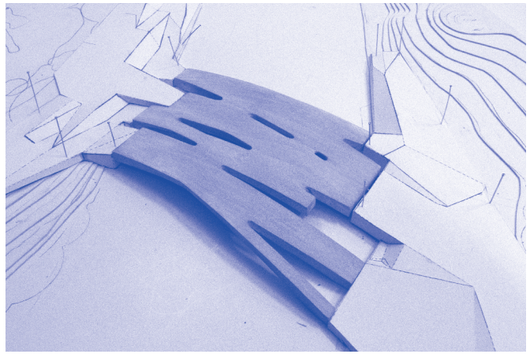

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7.8 ***River Torrens footbridge*, digital model |** non relational material serving as a catalyst, Adelaide, Australia 2012

7.9 ***River Torrens footbridge*, timber and card model |** developing a relationship between object and ground, Adelaide, Australia 2012

socially meaningful outcomes that can be comprehensibly communicated to a wider audience. At times, I use initially meaningless *operations* to create a project's point of departure. For *Thalia Graz*, I materialised the voids in the neighbouring building fabric and superimposed them onto the site (fig. 7.24). For the competition *WIFI St Pölten* (2011), I traced the outlines of earlier projects and used them as a two-dimensional cutting device to divide the volumetric representation of the programme into smaller units. This resulted in a fine-grained field, unrelational to the brief, whose individual elements were then manually manipulated to overlay the programmatic needs with found spatial organisations (fig. 7.4–5). For the *River Torrens footbridge* (2012), I compiled a three-dimensional overlay of earlier projects that intersected on the site. These processes are aimed at creating spatial fields from the arbitrary arrangements of artefacts, presenting me with material for associative interpretation and imagination (fig. 7.8–9).

The role of the unreasonable in my own design process is twofold. Initially, it is used to disassociate myself from my own predispositions and the premature imaginings that come with a given task that to some degree is familiar to me. Then, I use this disassociation to strengthen the role of the author. By inviting an alien component into the design process, I temporarily relinquish control, with the benefit of new suggestions being displayed. In the process of working through the material, interpreting again and again, I assign and reassign meaning. This brings the author back into the equation, who, in the presence of the 'other', has to make a stand for his own convictions. This engages the designer in a reciprocal and critical dialogue with his own preferences and alternative suggestions. In the process,

I shroud my own predispositions with the formal noise of the unrelational field of information. Then, in a second step, I send out visual pings in order to reconstruct my personal history from the reflected echo of the bodies found within the spatial field. The unreasonable beginning becomes a sparring partner that helps me to keep focus on what is essential to me while at the same time splicing new information into my own creative DNA/spatial intelligence.

Catalysts—Inevitably, my personal background described earlier influences the way in which I resolve a project. This is evidenced in the recurring morphologies that can be identified in my work. The question is, if things, despite experimental undertakings, look similar at the end of the process, why would I need to introduce the 'other' in the first place? I claim that by introducing the unknown into the equation, followed by a reciprocal loop of observation, assessment and correction, I give exterior ingredients the chance to break through my personal preferences and become part of a novel solution that otherwise would not have been part of the Adjacent Possible. My subconscious repertoire of existing forms and solutions is forced to negotiate the present otherness, and while some new attributes are being eliminated, others are passed on to become part of an unprecedented solution that nevertheless displays the traces of its heritage. Introducing the unreasonable enables me to accept deviations that present themselves alongside a beaten track. In that sense, it is similar to the technique of surrealist painters, who force themselves to draw with the left hand instead of the right, willingly introducing a handicap to expand their artistic expression into novel territories, thus affecting phenotype (expression), genotype (content) or both. Both terms stem from genetics, where the reciprocal loop between introducing accidental material (DNA mutations) and the assessment of their physical outcomes is played out within a generational and an evolutionary timeframe.

Perception—Careful observation and the direct handling of material sit at the core of my practice. They are the prerequisite for hunches to arise, settle and form an idea. Although the unreasonable is brought in differently to each project, it is always present in a graspable/hand-able format. The extracted figure, however, is merely an intermediate step that is coupled with an imagined (unreasonable) dialogue between object and ground, and a rational synthesis to conclude the design. Sieving through the material is like panning for gold, even though at this point one does not know what to look for. You know it when you see it. Finding a lead affects me as a physical sensation of joy, making me wonder if, unconsciously, I am responding to a conditioning that occurred earlier in life. The recurring morphologies in many of my projects could hint in that direction. Presumably, I have had good experiences with certain types of objects or spaces in the past, and so my subconscious rings a bell when similar situations present themselves. Leon van Schaik supports this reading when asking: 'What if architecture were the product of our spatial intelligence? . . . forged from our ideas

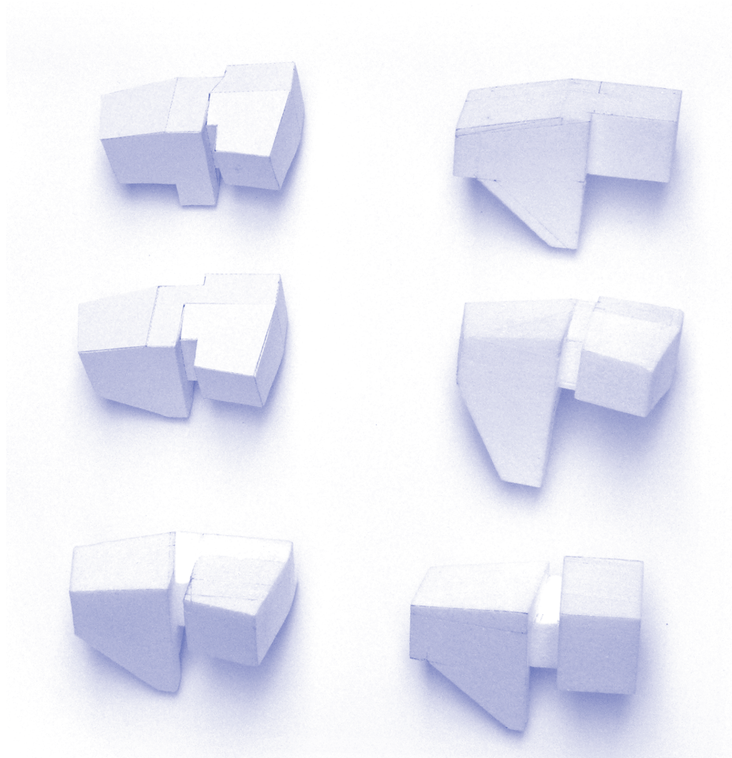
about space, our histories in space, our communal mental space all built upon that combination of inherited capabilities that evolved into us . . .'.[17] Triggers set by my architectural upbringing could be the 'lifted mass', responding to the mantra of Coop Himmelb(l)au's leaping whale, or the discovery of spatial situations that align with what Prix describes as the desire of Austrian architects to design 'complex space rather than a simplified box'.[18]

The indeterminate material at the beginnings of a project could be described as a screen that is necessary to both consolidate the projections of one's unconscious and present them in a different light that aims to uncover one's blind spots. 'Seeing' the potential of what is there requires a self-forgetful openness towards the situation. In the process of assessing the external inputs, the architectural figure emerges as a vague allusion as if projected onto a fog. The presence of the 'object to be' is indicated by a latent change in atmosphere or rise in tension. Sensing this shift is my personal way of assessing both form and subsequent content. It happens while I am making, when I am fully immersed in the material, when I am part of it. Jackson Pollock describes: 'When I am *in* my painting, I'm not aware of what I'm doing. It is only after a sort of "get acquainted period" that I see what I have been about'.[19] For me, the design process alternates between two different epistemological realms: emotional and intellectual. Together, they productively link my personal sensing of 'form as space' with a consensual approach of justification – 'form as meaning'.

Jasper Morrison adds:

> Objects must make good atmosphere . . . As a child I managed to feel completely unhappy in a place that seemed to me to have a bad atmosphere. My sensibility was excessively fine-tuned in relation to situations: when I was in the wrong place, I could feel my personality disintegrating. And that there was no way I could protect myself or pretend to adapt to the environment in which I found myself . . . this weakness allowed me to develop a better than average sensibility for the atmospheric effects of things on their surroundings. That's why I became a designer.[20]

Exaptation—Until now, I have been looking at the interpretation of unspecified structures and their evolution towards a higher degree order. A similar sensing of atmosphere happens when serendipitously engaging with objects that already have a defined purpose. To harness these findings, one needs to suspend one's engrained judgement and allow a mental openness for reinterpretation. Children naturally misappropriate items in their play, while adults have often lost this flexibility of seeing things differently from what they actually 'are' or are supposed to be. This goes hand in hand with the establishment of professional bodies and institutions that protect their respective areas of expertise and established behaviours. The protection of the term 'architect' and those who are allowed to act in its name is just one example. While there is a valid benefit to establishing minimum standards and accepted procedures, claiming a privileged access to specialised knowledge happens at the cost of impromptu leaps in evolution.



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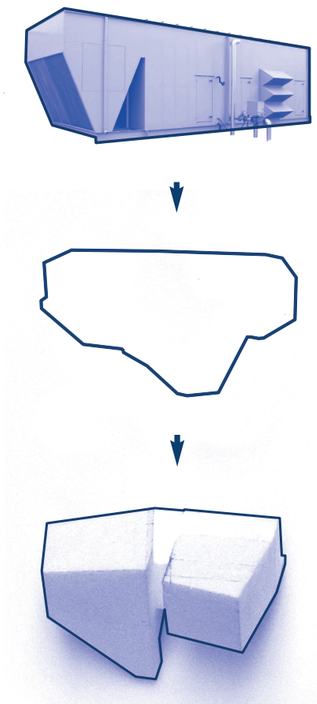


7.11

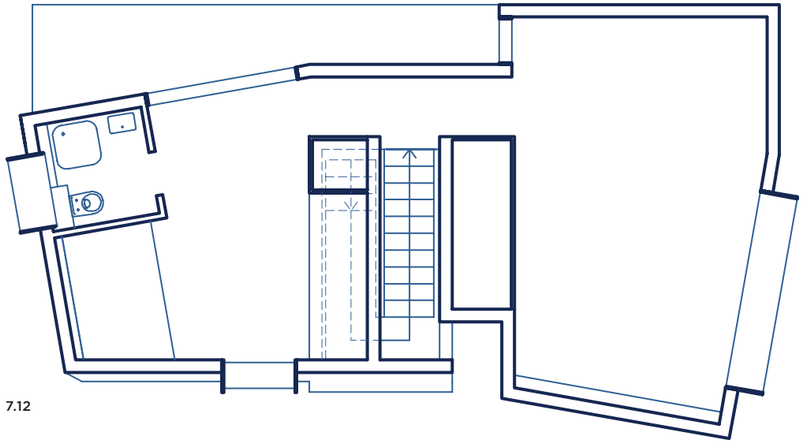
7.10 ***EAF extension*, polystyrene models |** evaluating character and space, Adelaide, Australia 2009

7.11 ***EAF extension*, collage |** conceptualising and steering the project's reception, Adelaide, Australia 2009

Many innovations emerge from crossing boundaries between one area of expertise into another when a particular virtue is transferred and put to use for something for which it was not originally designed. Evolutionary biologists Stephen Gould and Elisabeth Vrba coined the term 'exaptation' for this process.[21] Exaptation describes the evolutionary process in which a particular trait of a species shifts from serving one purpose to enabling an altogether different one. Examples of exaptation are found both in nature and cultural behaviours, for example feathers were originally evolved for temperature control, covering the bodies of earth-dwelling animals before they also turned out to be useful for flight. It exemplifies 'function follows form' as the structural basis of evolution, effectively twisting Sullivan's established dictum, and

7.12 ***EAF extension,***
floor plan 1:100, Adelaide,
Australia 2009

7.13 ***EAF extension,***
section 1:100, Adelaide,
Australia 2009



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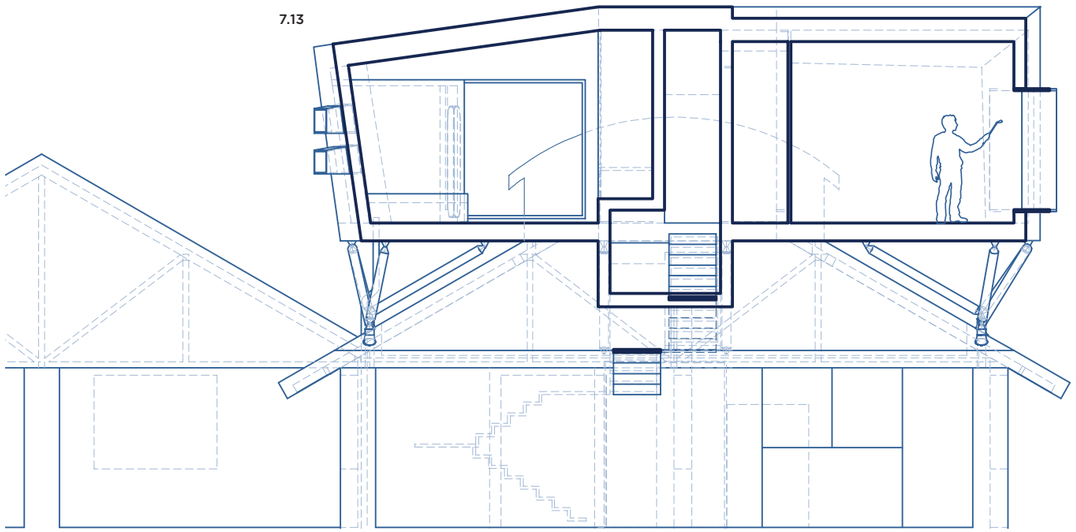
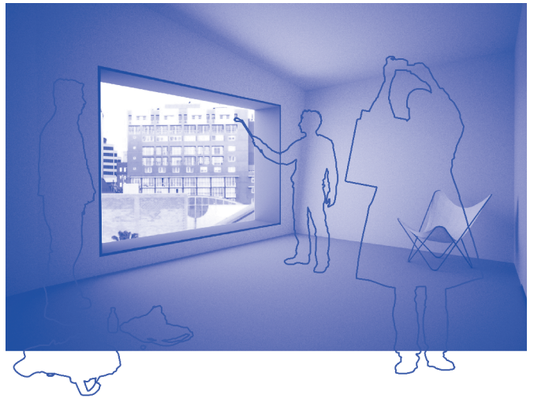




7.14

7.14 ***EAF extension,***
internal programme distribution,
Adelaide, Australia 2009

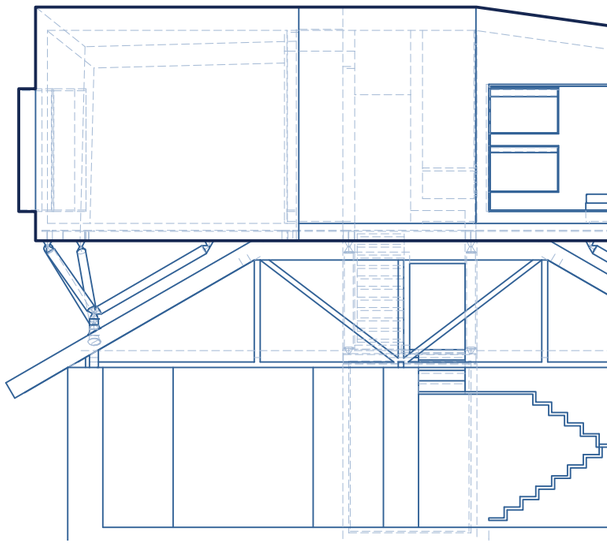
7.15 ***EAF extension,*** eastern
elevation, Adelaide,
Australia 2009

7.16 ***EAF extension,***
physical model, Adelaide,
Australia 2009

7.17 ***EAF extension,***
artist-in-residence studio,
Adelaide, Australia 2009,
© Daniel Kerbler

7.18 ***EAF extension,*** x-ray
axonometric, Adelaide,
Australia 2009

7.19 ***EAF extension,***
north and south elevation,
Adelaide, Australia 2009



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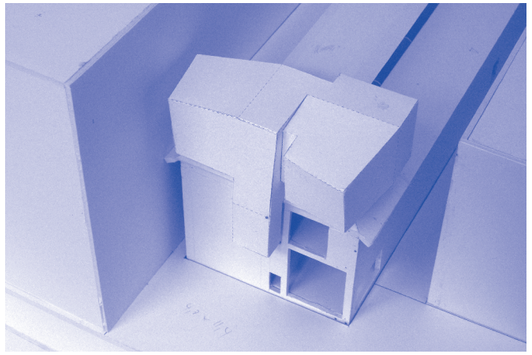

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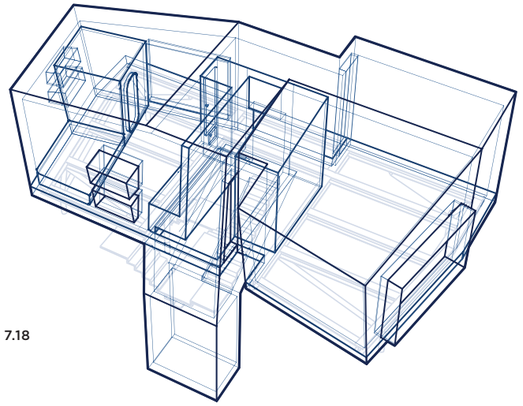

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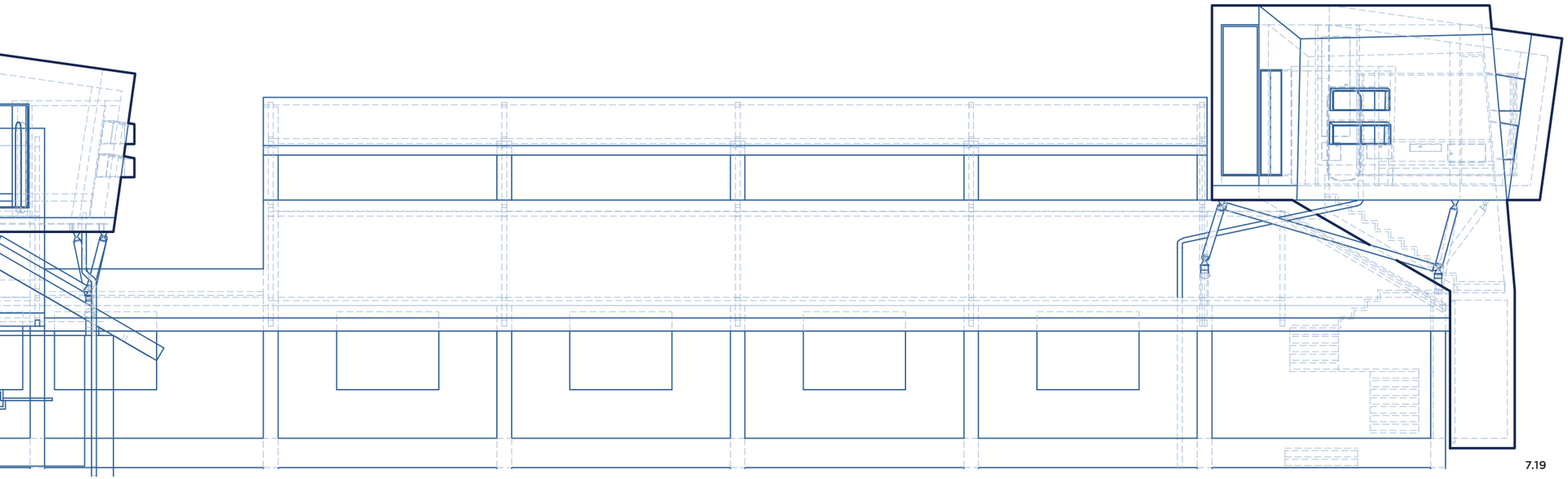

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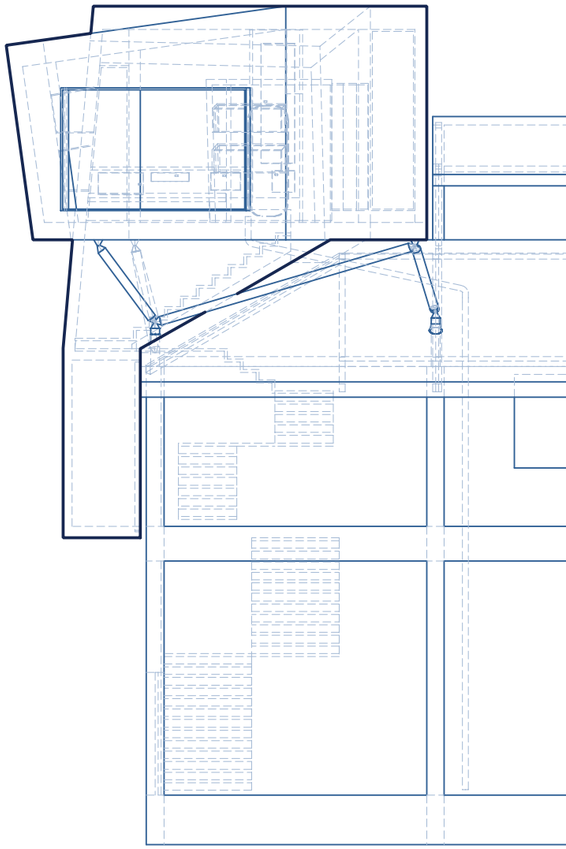

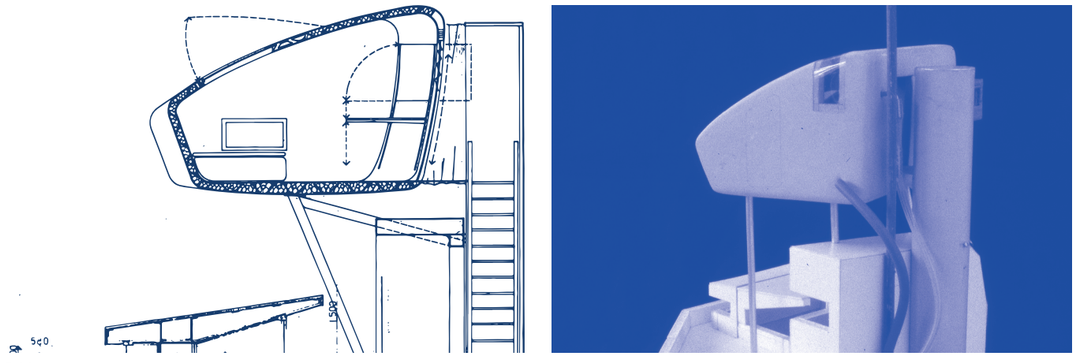

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7.20 ***Suzuki house extension,*** **section drawing and physical model 1:50 |** independent unit for the teenage daughter, Tokyo, Japan 1995

acknowledging the potency of (accidental) form as the start and crystallisation point of ideas and unpremeditated solutions.

In the fifteenth century, Johannes Gutenberg effectively puts the mechanism of a wine press to use for the invention of the printing press. Coop Himmelb(l)au's *rooftop remodelling Falkestrasse* (1983/1987–8) only succeeds by cunningly applying a frame of reference from one area, the art world, onto another, the context of building approvals, and thus exploiting a loophole in the council's approval process. Instead of representing it as architecture in the documentation, the structure was declared as a piece of art. There was no regulation in the building code that banned art installations on buildings. Therefore, within the legal context of the planning submission, a building disguised as sculpture became invisible to the authorities. Prix often refers to this as an example of how architects need to think strategically in order to overcome a system that resents change. However, Coop Himmelb(l)au masking architecture as art is more than just a ploy; it is in fact their position that architecture and art sit alongside each other – that 'architecture has always been art'[22] and that it therefore demands the same freedom of expression. Looking at my own work, I see the ***EAF extension*** (2009) as an example of the use of exaptation. James Curry describes:

'This proposal for a combined visiting artist studio and residence upon the rooftop of an existing facility takes as its starting point the often overlooked but extremely pervasive air-conditioning unit installed on rooftops throughout the city. Exploiting the schism between content and form, the proposal is both familiar – by taking on the formal appearance of an air-conditioning unit – yet uncanny, through its parasitic relationship to its primary host the EAF. This formal and visual ambiguity, at once familiar yet strangely alternative, parallels through its appearance the visiting artist(s) relationship to the city – being at once of the city yet at the same time entirely distinct from it. In addition, the proposal aims to be catalytic, transforming the existing facilities both programmatically and formally, whilst having a dynamic relationship with the context. Swerving away from both representational and formal models endemic within the discipline, the proposal takes on a performative role within the city as it aims to multiply meanings as each artist's shifting relationship to the residency alters between blind indifference to fully appropriating the architectural object. Through both extending and enlarging the scope and ambitions of the brief, the proposal aims to provide something at once surprising through its subversion of given expectations (i.e. a residency) and supplementary to both institution and observer.'[23]

Masking established connotations and value systems enables a designer to 'see anew' and become aware of the potentials presented by misappropriated objects, and stage semantic transfers, in this case from the context of infrastructure to human habitation. Besides addressing the client's needs, the project also offers a social surplus by engaging the public and the profession in a dialogue about the ways that design policies shape our cities. By identifying the existing rooftop infrastructures as a local typology, the project ironically discusses the council's guidelines for design approvals, effectively questioning its desire to use the argument of contextualisation as a means to enforcing the emulation of local appearances. Discovering such solutions and putting them to use gives me joy. Creating an object that (1) solves a problem while (2) having an aesthetic value that contributes positively to the atmosphere of the place and (3) instigates a discourse makes me happy.

The key principles in the development of the EAF addition are: (1) identifying air-conditioning units as a prevalent rooftop typology in the Adelaide CBD, (2) acknowledging the building code that asks for new developments to mimic 'local character' and (3) overlaying both to justify the transformation of a technical infrastructure into a habitat for visiting artists. In this case, volumes originally used for condensation and evaporation in an air-conditioning unit now facilitate studio, bedroom and storage spaces. And while the physical environment stays the same, the context of reception and evaluation changes from the technical performance of a piece of infrastructure to legalistic guidelines governing the aesthetics of human habitation. To manage this displacement, moving from one value system to another, the architectural object draws on a tactical deceit, allowing it to be read as either infrastructure or dwelling, depending on the viewer's perspective. In the process of gaining planning approval, the object disguises itself as a local typology, thus allowing it to subvert the 'local character' guidelines intended to regulate architectural expressions. The overall form, materiality and location of the object denotes 'infrastructure', while

single elements such as windows and balustrades signify a human measure, creating a dialectical movement between two readings. Depending on the readers' history and knowledge, this undecidedness can flip either way, or be resolved in the connotation of the actual artistic context, indicating that architecture can be read similar to a language, if one has learned to read the signs.

To steer the audience's reading, I created the narrative of 'The secret life of an air-conditioning unit', in which the architect accepts the commission of a worn-out unit that asks for a cosmetic and structural makeover, similar to plastic surgery. Drawing on its ancestral genes, the existing structure is dissected and an alternative internal organisation and appearance projected. This results in the invigorated unit confidently taking on a new role within its existing neighbourhood. In the design process, a dialogue between the incoming object and its new ground evolves, along which the object's structural system aligns itself with the load paths of the existing EAF building, whose circulation is extended upwards to open up to the new development. The result is an architectural character that gives a previously invisible institution a new presence.

More conventional examples can be found at *Uralla Court* and the *Suzuki house extension* (1995). These projects draw on using vessels as a typology in transportation for architectural purposes. At *Uralla Court*,[24] the initial positioning of volumes imagines an incoming boat (the clients' vessel on their journey from Europe to Australia) that is jacked up on site, giving access to the area below the waterline. I found this configuration very intriguing, as the boat remains a vessel while also becoming a roof sheltering the ground below. Due to its new context, the boat's inherent affordance has been changed, creating a new, to-be-defined, space between the elevated hull and ground.

The floating vessel – a house without foundation – has become the archetype for the object–ground relationship in my projects. Another example is the *Suzuki house extension* in Tokyo. The proposal of an addition to the house designed by Peter Wilson stems from the need for more room caused by a growing family. The new volume provides independence for the teenage daughter, whose new retreat draws on an analogy to the Space Shuttle before lift-off. It is a self-contained unit that, despite not denying its dependence on the home base, signifies autonomy and offers greater independence for the daughter.

Collaboration—The unreasonable may be introduced not only as an artefact but also as activities that disturb established patterns of behaviour. It is the act of cooperation as a means to throwing sand into the established mechanics of logic and organisational patterns. Similar to the previous examples, the intention is to present a biased mind with alternative scenarios that may kick-start an unfamiliar stream of thoughts and events. For the exhibition *To the Islands – The Architecture of Isolated Solutions* (2011), the curators asked architects and artists to form teams and collaboratively interrogate the architectural qualities found

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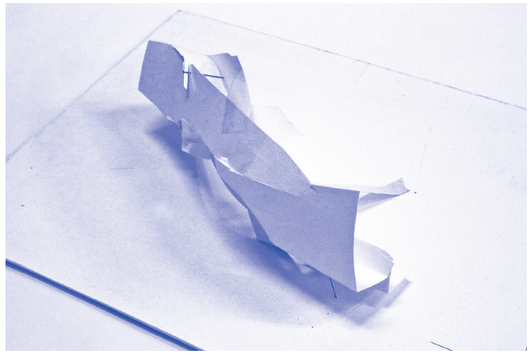


7.22

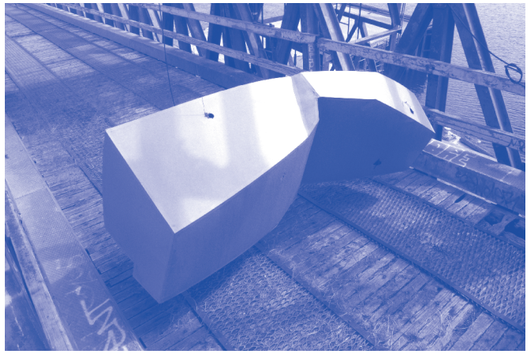
7.21 Bette/Brünner, *Unreasonable topographies*, video still | performative site reading #2, Port Adelaide, Australia 2011, © Margit Brünner

7.22 Bette/Brünner, *Unreasonable topographies*, paper model | performative site reading #2, Port Adelaide, Australia 2011

within the concept of islands, as described by Lucian of Samosata[25] in his fictitious travel literature, *True Stories*. For me, the unreasonable was introduced through the artist Margit Brünner, whose conversations with the site stood at the beginning of the design process.

'Margit's work is ostensibly located between the spatial arts and performance art, but she is an architect. Her explorations endeavour to discover the best means of producing joyful affects, with an emphasis on the milieu, or relationship between the environment-world and ever-transforming subject (or processes of subjectification): this is what she names atmosphere. Hers is a practice of immanence, ever located, situated, inspired by embodied learning.'[26]

Margit Brünner and I agreed on selecting two different thematic strands within Samosata's work, *Oceanic Monstrosities* and *Production without Effort*. The text, the collaboration and the suggested workflow defined the unreasonable for this project. In order to produce a collective work, we set up a mode of operation in which each of us would iteratively interpret the other's artefacts and develop them further. Margit started with models that were passed on to me. I used them as a point of departure and then returned my interpretation to her for another round of iterations. Despite the co-production in bringing the work about, we never discussed each other's steps or worked together on a piece, except for the mounting and hanging of the exhibition. In this case, the experimental beginnings were site related, as Margit had produced them in response to her performative interactions with a particular site in Port Adelaide. Anything from the site can contribute to the project in a meaningful way, even when at the beginning its value cannot be assessed. In contrast to a traditional site



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7.23 Bette/Brünner, ***Unreasonable topographies***, installation, Port Adelaide, Australia 2011

analysis, asking concrete questions and expecting concrete answers, the concept of the unreasonable starts with an unfocused collection. I believe all material carries information specific to the site and project, whose value only emerges during the processes of interpretation and seeing things, when the designer's own predispositions and the general intent of the project are projected onto them, and an idea or form is gradually being carved out. More details on this project can be found in the chapter Case study | experimental.

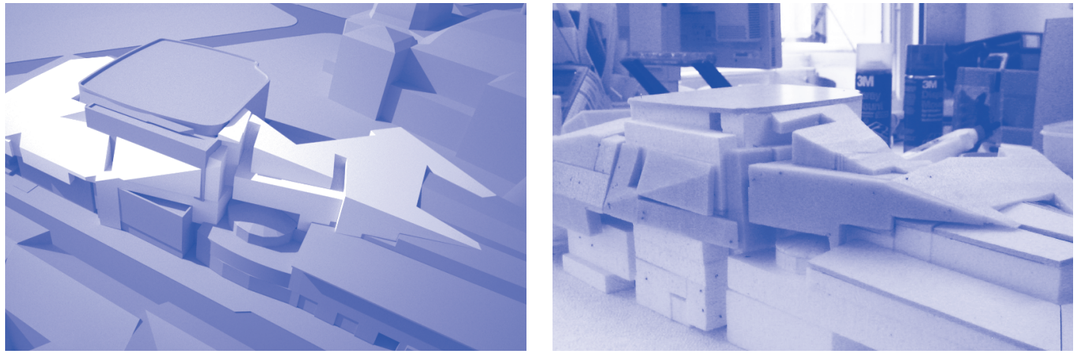
Intuition and neuroscience—Another way of introducing the unreasonable is through the manner in which I handle the material, allowing myself to be guided by intuitive moves instead of reason. Accepting the intuitive hunch is a prime example of an unreasonable behaviour disdained by an architectural profession that is keen to present its services as rational and objective. The benefit of intuitive moves lies in drawing immediate, subconscious connections between the designer's past experiences, current observations and the task at hand, allowing them to draw up possible leads instantaneously. These judgements are made ad hoc, similar to those of a chess player who engages in the blitz variant of the game.[27] Without time to analyse the situation consciously, the player relies on entire chunks of knowledge instantaneously leaping into the moment and being turned into action. The resource for this immediate, and for the time being un-reflected, activity lies in our personal histories and experiences. One might argue that this tacit knowledge will only give access to a repository of existing and known design solutions, resulting in uncreative repetition so to speak. Yet, neuroscientists suggest otherwise. Their research shows that besides our conscious processing of archived experiences, our

brain also arbitrarily recombines existing material. This happens on a subconscious level and is then presented to us as preformatted knowledge, as instantaneous experiences, a déjà vu or hunch.[28]

According to current research, the neurons in our brains alternate between two different modes of operation: phase lock and phase shift. During phase lock, clusters of neurons pulse in synchrony, while in phase shift, their electrical impulses fire in an unstructured way. The synchronous phase-lock mode gives access to verified patterns, bringing memories or practiced movements forward, while the improvised and random access of phase shift creates new combinations of existing knowledge. The majority of these combinations are worthless. Yet, every now and then, one of them produces a hunch, which, if picked up, is developed further to become an insight. Robert Thatcher from the University of South Florida proved that the duration of phase shift correlates directly to a person's IQ. In his experiments, subjects with a longer phase shift, allowing more unstructured combinations to be made, showed an increased ability to solve creative tasks and performed better in IQ tests.[29]

It is a romantic misunderstanding that intuition is some sort of mystical gift, allowing us to receive an insight ex nihilio. Instead, our mind draws on an existing pool of information, consisting of past experiences and current perceptions, from which it constructs what we refer to as 'reality'. This 'second-order' reality presents itself as an intuition, to which we thereafter consciously assign meaning. In creative works, insights may announce themselves as hunches or premonitions. They tentatively bridge the gap between the unconscious sensing of the world and the creative recombination of past experiences with present perceptions. Picking up on a hunch demands an attentive mind – one that recognises its potential validity and gives it space to develop. A hunch is not a solution or idea yet, but rather the feeling for a possible lead towards an idea. Following an intuition is dependent on the individual's value system, which will either allow or inhibit it. While designing, I notice a possible lead as a bodily feeling. It is not an articulated thread that I can name, but rather the registration of joy, which builds up when handling material that could potentially become significant. The sensation is similar to those moments when you know that the answer to a specific question lies on the tip of your tongue, but you are not able to spell it out, and is combined with excitement. The Spanish sculptor Eduardo Chillida notes: 'I know the work before I make it, but I do not know what it will be like . . . I know its aroma'.[30]

Inaccuracies—Intuition is an offering[31] that increases a designer's range of options from which a solution could be crafted. A prerequisite for its application is the awareness of oneself and the material with which one works. When engaging in physical experimentation and model building, I reach a state of self-forgetfulness when work becomes serious play. In order to sense a lead, I need to be immersed in the material and not distinguish between myself and the world. Physical models are the format that my subconscious relies on



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7.24 **Sam/Ott-Reinisch and Bette,** *Thalia Graz*, digital and physical sketch models, Graz, Austria 2009

to assess spatial qualities and transform them into architectural ideas. For me, they are a prerequisite for architectural design, as I believe that a three-dimensional problem can never be adequately solved in just two dimensions. I am not saying this to diminish the role of drawing, which I similarly consider as a mode of 'physical' thinking, combining haptic and intellectual understanding in a way for me that digital modelling does not. The emphasis here definitely lies on 'me', just as I believe in the ability of other designers to be 'in' their digital models or processes.

At times, I have delayed the production of models, thinking I could solely rely on my digital modelling and rendering skills, but the screen has often fooled me. Or rather, I have fooled myself by making things look better on screen than they actually were in the physical world. I start a project with a couple of sketch models, which can be either digital or physical, but then maintain at least one physical model that I constantly work on throughout the entire course of the project to allow for continuous referencing and cross-checks. In this process, supposed errors or inaccuracies in the physical model are not eliminated but rather assessed for their performative potential and brought forward into the digital model. The first set of drawings for the *Uralla Court* project captures the supposed implausible aspects of an early model such as the curved floors or warped walls. I had faith in this model and needed to suspend my disbelief temporarily that it would be buildable or acceptable to the client until I reached a better understanding of what its core proposition was. After reaching clarity about its specific qualities, I began an editing process that carefully shifted the geometry into a viable framework while maintaining all the encountered spatial qualities.

For *Thalia Graz*, the first sketch models were digital, but they were immediately replicated as physical models in order to

assess their formal and ideational potential fully. Made from polystyrene foam, these volumetric models were quickly pinned and taped together, unpretentiously handled, allowing for continuous transformation or easy dismantling. The next generation of working model was made from white foam core so that it not only described the architectural body, but also could be used to test the organisational performance and the internal spatial qualities of the proposal. This model would be worked over again and again so that the traces of previous stages remained visible. In this way, the model becomes a four-dimensional diary, presenting not just the genesis of the project, but also, if one can say, its spatial intelligence. Although allowing the return to earlier versions, due to its cleanness, the digital model does not present a project's genesis in such an instantaneous way as touching the scars on a physical object does. Yet, I do not want to miss the digital sibling running in parallel. The numerical control allows for greater precision and efficiency, and is used to incorporate functional and site-specific parameters. The consequences of alterations made in the digital model, and vice versa, are transferred to the physical model and assessed there, iteratively switching between physical and digital models until a satisfactory outcome is achieved.

Both the digital and physical can define the start of a project. However, it is mainly through the physical models that I validate my design decisions. The value of physical models lies in their lack of exactitude, and as such they present a variation of the leitmotif of the unreasonable as a source of serendipitous finds and insights, which are fanned by error and imperfection. These deviants animate the work through the energy and improvisations they demand from the designer in dealing with them. The unique history of the physical model, evidenced in quirks, marks and scars, creates a subplot that contributes to transforming the work from object to individual character.

The inanimate—Another irrational technique that I use is to allow myself to develop an empathy with the inanimate objects I deal with. During the course of a design, I alternate between immersing myself into the architectural figure and the ground, imagining how each of them would react towards the other. This is done by assuming the liveliness of the agents involved: the author, the object, the ground and the space that develops in the void between them. I iteratively switch roles between them, immersing myself and moderating their dialogue. One might question whether my empathy reveals existing conditions genuine to the agents, that is, excavating the genius loci, or if I am merely projecting my own agendas onto them. Essentially, this is irrelevant, since in this process, I do not distinguish between myself and the surrounds. In analogy to Jackson Pollock's phrase 'When I am *in* my painting . . .'[32], I am *in* my model. The process of developing empathy with the 'other' will be further examined in the chapters on agents: characters – space – ground.

The agents' character develops in response to a dialogue that I enact between them. This dialogue takes place in a void that results from keeping a strategical

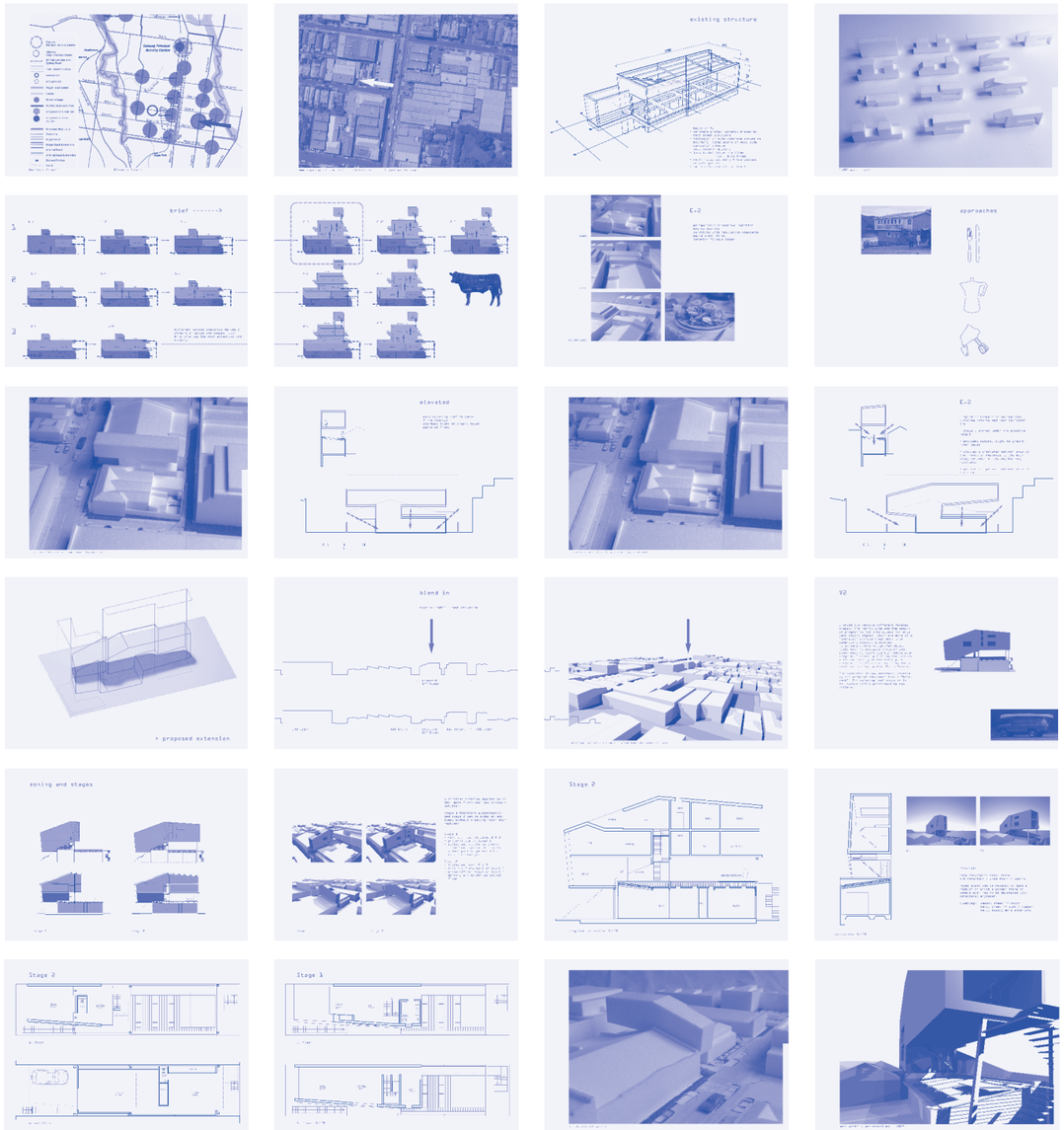
distance between the introduced architectural object and the ground. It is from here that the performative relationship between the two physical protagonists unfolds. In the process of negotiating their co-existence, object and ground gradually differentiate, developing a presence that charges the void between them until it begins to emanate its own atmosphere. This is one of the most important stages in the project, as it indicates the emergence of space, the core offering of architecture. The lift in atmosphere, when the void starts to feel right, tells me when to halt the design process. Likewise, the ground and the character emanate an ambience; they radiate space. There are no quantifiable parameters for this sensation; it is just a feeling to which I respond. It develops through handling the form in conjunction with careful observation.

The blueprint of my design process is characterised by a threefold choreography. A central sequence of choreographed events is subject to two different modes of assessment. One is based on intuitive and emotive cognition, giving voice to the author and assessing 'form as space'. The other engages in an intellectual synthesis of the morphological genesis, assessing 'form as meaning' and aiming to conceptualise a project by applying a frame of reference that can be shared with others. The unreasonable is present in two different ways. In the first instance, it acts as a catalyst for the design process, introduced for example as a three-dimensional field of information, a found object or the collaboration with another person. Its purpose is to counter superficial predispositions while at the same time strengthening the position of the author who, in the process of working through the foreign material, has to make a stand for his own convictions. Being driven by emotive cognition and intuitive synthesis represents the second instance of unreasonableness in my design process. It allows hunches to settle and materialise before a judgement is made, and is tied to assuming the spiritedness of the architecture itself and the ground it sits upon. While following the choreographed events between object and ground, I develop an empathy for the objects I handle. While iteratively immersing myself into the material, I reach a state of self-forgetfulness where work becomes serious play. Sensing a lead for a possible design solution affects me as a bodily feeling, a registration of joy. The bodily feeling is an expression of my receptivity towards meaningful collisions within the chance encounters I prompted in the first place. Being an observer with a personal history, spatial intelligence and knowledge base, particular clues within the material are picked up, associated with other project relating facts and combined towards a conceptual idea that will eventually crystallise in form and meaning.

Notes

1. 1963, together with Walter Pichler.
2. Hollein and Weibel, *Hans Hollein*, 56.
3. Von Foerster, 'Ethics and Second Order Cybernetics'.
4. Von Foerster, 'Ethics and Second Order Cybernetics'.

5. Verbeek, 'Randomness as a Generative Principle', 6.
6. Breton, *Manifestoes of Surrealism*, 9.
7. Breton, *Manifestoes of Surrealism*, 14.
8. Breton, *Manifestoes of Surrealism*, 26.
9. Duchamp quoted in Manolopoulou, *Architectures of Chance*, 183.
10. Barthes, 'The Death of the Author', 144.
11. Barthes, 'The Death of the Author', 146, 148.
12. Eco, *The Role of the Reader*, 3, 47.
13. Glanville, 'Second-Order Cybernetics', 64.
14. Karmel, 'Pollock at Work', 87–137.
15. Prix, Kandeler-Fritsch and Kramer, *Get Off of My Cloud*, 240.
16. Pallasmaa, *The Thinking Hand*, 15.
17. Van Schaik, *Spatial Intelligence*, 8.
18. Prix, 'Let's Rock over Barock', 4–6.
19. Varnedoe, Karmel and Pollock, *Jackson Pollock*, 92.
20. Morrison, 'New Masters', 86.
21. Gould and Vrba, 'Exaptation – A Missing Term', 4–15.
22. Prix, 'Homeland Utopia', 3.
23. Curry, 'Artist in Residence Studio', 145.
24. Design for a residence and studio in the Adelaide Hills, Blackwood, South Australia.
25. Assyrian novelist and rhetorician, 125–180 CE.
26. Frichot, 'Five Lessons in a Ficto-Critical Approach', 13.
27. A fast version of chess, 3–15 minutes per side and move.
28. Johnson, *Where Good Ideas Come From*, 99–106.
29. Thatcher, North and Biver, 'Intelligence and EEG Phase Reset'.
30. Chillida, *Eduardo Chillida: Writings*, 15.
31. 'And so, through all the thick mists of the dim doubts in my mind, divine intuitions now and then shoot, enkindling my fog with a heavenly ray. And for this I thank God; for all have doubts; many deny; but doubts or denials, few along with them, have intuitions. Doubts of all things early, and intuitions of some things heavenly; this combination makes neither believer nor infidel, but makes a man who regards them both with equal eye'. Melville, *Moby-Dick*, 409.
32. Varnedoe, Karmel and Pollock, *Jackson Pollock*, 92.



8.1

Modes | analytic

This chapter examines the ways in which my creative process fluctuates between irrational progressions and an objective means of justification, and how I deliberately use representational tools to 'make sense' while oscillating between two different epistemological realms: emotional and analytic understanding.

Design is about ideas that are so simple that one should be able to explain them to someone else over the phone.[1]

Conceptual feasibility—Being able to communicate someone else's content and ideas has been an intrinsic part of my studies in communication design, be it in film or graphic design. This is where I started to differentiate between my own perspectives and those of the audience, as well as consciously trying to consider a situation from someone else's point of view. In architecture, I have always been unsure about if and how I should communicate my subjective investigations into the relationship between character and ground and the resulting emergence of space. Not everything can be described as a diagram or a comprehensible script of events. Even though they contributed to the project, I realised personal agendas and aspirations might not be relevant to others. So, I started to edit them out and orchestrate a 'reasonable' way in which I wanted a project to be read. I continue this practice when I test and validate the conceptual feasibility of a project through the production of storyboard booklets that run parallel to the design development, right from the start. Producing a graphic representation helps me to sieve through the material and select the pieces from which a coherent proposal can be formed. I do so by applying different frames of reference in order to explore where the project's contribution might lie. Insights from this process continuously feed back into the design process, oscillating between design morphology and content reception. Conceptual feasibility is achieved when the project's argument can be condensed in an abstract form and successfully communicated. The booklet production facilitates the iterative break between doing and assessing, between making choices and weeding out excess, in order to arrive at an idea that can be shared and successfully communicated. Ideally, the process enables me to coalesce personal and outside agendas within a single project.

Diagram versus eclectic—Neither words nor drawings can properly project spatial experiences. They can evoke connotations in the learned and experienced, but the

8.1 ***AN house*, presentation booklet** | interrogating a design problem through graphic representation, Melbourne, Australia 2009

8.2

8.2 **Bette, Friel, Iserloh, Novak, *Hamburg, März 1991*,** Umatic video, Düsseldorf, Germany 1991

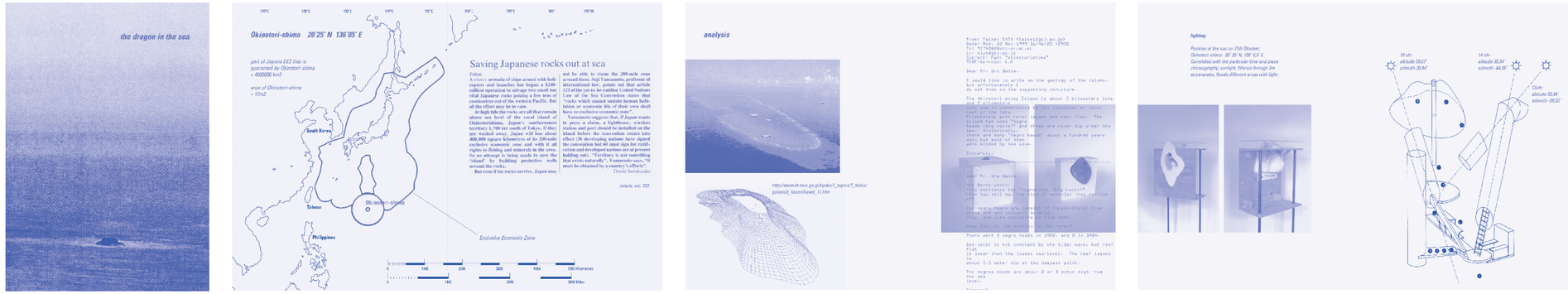
atmospheric feel and identity of a project cannot be validated in advance. From the perspective of an architectural discourse that revolves around quantifiable performance or theory-based validation, this is not a problem. As a consequence, 'diagram architecture' has become so successful, as it replaces eclectic poetic relationships with evidence-based equations. The built result is measured against its projection, the diagram, and thus appears coherent in the end. However, this easy affirmation is only achieved at the expense of multi-layered contents, as subplots that enrich the architectural experience are edited out in advance. Yet, architecture, different from building, is committed to delivering a cultural surplus beyond its functionalist brief. The architectural identity manifests itself through political expression, sensorial stimulation and civic aspirations. As the commissioner of an architectural project, one has to invest in trusting the designer to deliver on this surplus. Making sense of a project through the production of a graphic booklet representation may appear as a translation into the vocabulary of diagram architecture. The difference is that I define a project initially through my own personal agendas in being concerned with how sculpted form and the dialogue between object and ground triggers the experience of space, and then I wrap them in a digestible narrative. The reasonable aspects of architecture – purpose, meaning, structure – are not abandoned but simply given second-order priority in the design process and are then brought to the front in the communication of the final product. Parallel to a design process that reflects my own subjective agendas, I construct a storyboard to satisfy the audience's desire for reason and universal meaning. Both perspectives, personal and external, are carefully woven into the project. The booklet production helps me to switch between perspectives, incorporate different value systems and lay out a trail along which I like the project to be read and understood.

Paul Minifie commented on the booklet reflection:

'It seems that this is part of an internal process as well, not dissimilar to the way you do stuff, but then there is a moment at which it becomes a thing. You know, at which point you identify that the project has some particular satisfying set of characteristics. But more than that, they seem to acquire names, right? And the names give an account of the qualities that those projects attain for you at a particular moment, when you go, right. So that is how it is going to take its form, the air conditioning duct or piece of ground, or you know, the hovering thing. That to me is a really interesting moment, in what you do. It's almost like you are discovering the creatures of your subconscious, and you're bringing them into the world. At a certain point they achieve a kind of critical set of relations that enable them to become something.'[2]

Making sense—The first time I consciously applied the approach of assessing and communicating a design through a storyboard was for my final project at the Angewandte, *The Dragon in the Sea* (2000). The tiny island Okinotori-shima is situated in Japan's southernmost territory in the South Pacific Ocean. At high tide, two rocks, three and five metres wide, are all that remains of the island. Without these rocks, the country would lose 400,000 km^2 of its exclusive economic zone and, with it, all rights to fishing and mining. With each typhoon, the rocks are getting smaller.

8.3 ***The Dragon in the Sea*, project booklet** | documenting the research and synthesising possible solutions, Okinotori-shima, Japan 2000



8.3

That is why the Japanese government is willing to spend 250 million dollars to protect the island. The United Nations regime on islands specifies that shorelines have to remain natural. Otherwise, it would be an artificial island without the rights to an exclusive economic zone. I spent the longest time gathering the little information there was about Okinotori-shima, and the booklet started out as a record-keeping device for my research. It then gradually evolved into illustrating my evolving solutions, the subsequent design and its economic validation. *The Dragon in the Sea* describes the poetic solution for a commercial and legalistic problem. It is the choreography of an annual ritual in which three people set out on a voyage to save the island. Orientated on its volcanic origin, material from the rock's interior is smelted onto its peak in order to replace the loss from erosion. A scientist, a machinist and a registrar travel to Okinotori-shima by ship. They survey the island, calculate last year's loss, excavate rock material, smelter and deposit it on the peak of the island. The symbolic act that follows constitutes the habitation and economic life of the island. They fish, trade the catch amongst each other, cook and have dinner together. All technical equipment is stored in a cavity inside the rock. Power and air are provided by the ship anchoring nearby. The island is entered through an airlock below sea level. Above, nothing indicates the existence of the intervention.

The poetic act of the ritual lies at the centre of my interest. Yet, I publicly appear to address the task from a different angle through cultural history, economics and international law. Validating a project by arguing it through a different agenda is a tactical move. It relates to the concept of exaptation, the transfer of a specific virtue from one context into another, applying an external frame of reference that defines the project's reading and public conceptual idea. My design process is divided into a personal agenda on one side and the observer's agenda on the other. For one, there is the relationship between character and ground and the emergence of space. On the other hand, there is the development of a rational argument that lies beyond form. Curator Roland Schoeny said about the project:

With its dramaturgical concept Bette discusses ironically and imaginatively the arbitrariness of the demarcation lines that are set in the wake of global trade agreements. He also raises the question of real and imaginary geographies. In his attempt to leave the usual perspectives of architecture, he leads his work over into concise spatial representation of spaces formulated by the specific situation and its economic background, knowledgeably transferring parameters from graphics, film and photography into his architectural display.[3]

Affordance—The booklet production raises questions of semiotics, and form as a signifier of meaning in architecture. In their introduction to *Reserve der Form*,[4] Angelika Fitz and Klaus Stattmann explain:

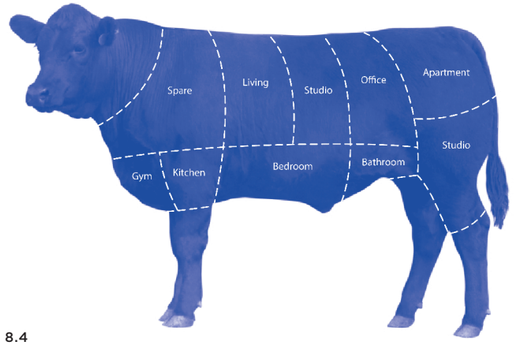
'Form is far more than the formal. Form originates from a complex and often contradictory combination of conventions and assumptions, and thus stirs established positions. The surplus of form causes parallel actions in aesthetic, social, economic and legal coherencies. Standardised relationships and operational boundaries are playfully extended. Non system-specific transversal movements, which should not happen in a functionally differentiated

society, become possible. Spatial experiments appear in places they were not envisioned for, either for cultural or legal reasons. Artistic practices transgress the symbolic level and bring forth political effects.'[5]

In *Complexity and Contradiction*, Robert Venturi notes that 'A valid architecture evokes many levels of meaning and combinations of focus: its space and its elements become readable and workable in several ways at once'. Clients commission architects to solve a specific problem that lies within a set framework of legal, financial and organisational constraints. Yet, architecture is multivalent, able to satisfy additional agendas without diminishing the initial brief.

Trojan horses—In the case of the *EAF extension*, the expectation was for an artist-in-residence studio, realised as an internal fit-out on one of the existing floors. Instead, my interest focused on the potentials of a volume sitting on top of the existing facility. This scenario responded to my own agenda (lifting mass) while solving the given brief and adding an uncommissioned surplus by providing signage and identity for the institution. In order to make this happen, I searched for arguments that made sense to others by identifying the prevalent air-conditioning units on top of neighbouring buildings as a local typology, with which the Adelaide City Council's desire for visual contextualisation through mimicry could be discussed. The project's storyboard spun the narrative of an aged air-conditioning unit in search of an architect to give it plastic surgery and thus a new life. Producing stories like this is fun. I ask the audience to suspend their disbelief and follow me on a fictitious yet coherent narrative that satisfies the public's desire for reason, while simultaneously delivering a performative and discursive surplus. The final design amalgamates the functional requirements of a dwelling while providing signage and identity for the EAF's cultural offerings. At the same time, the project aims to contribute to our ideas of dealing with architectural heritage by raising a debate about the values pursued in design approval processes and the ways in which site relatedness is both produced and judged.

Within the debates on city densification, the infill, modernisation and extensions to existing buildings, the project acts as a Trojan horse. It lays out a conceptual trail that, through its reference to an existing typology, appears to advocate the approach of 'new matching old', existing style and architectural language, while it factually seeks to implement 'new meets old', contrasting the existing with a clearly distinguishable other. It is an architect's game of camouflage, a mild form of deception, letting a project fly under the council's radar by projecting a recognisable decoy that allows the 'form' to be read in a different, equally valid, way. The validity, and sometimes necessity, of such an endeavour, alternating between 'being' and 'make-believe', was exemplified to me by Ernst Fuchs, with his stealth insertion of an alien house into a traditional Tirolean village, the *Zirl House*. Meaning is subject to the imagination of the observer, who, with reference to Heinz von Foerster, creates



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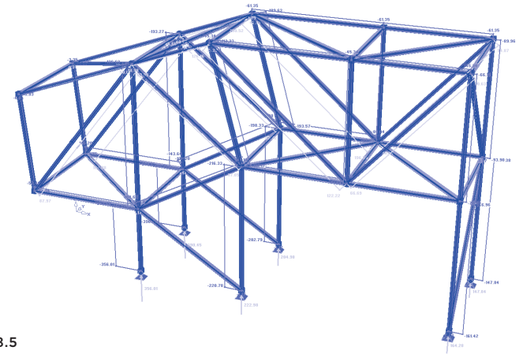


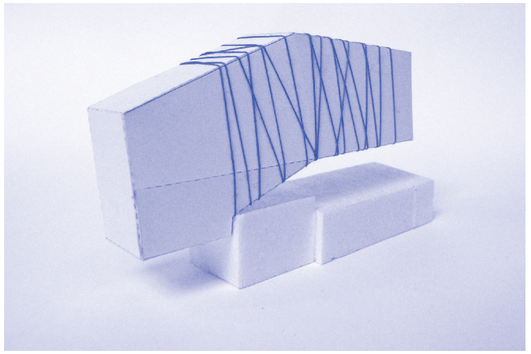
8.5

8.4 ***AN house*, programme diagram** | responding to the client's background and programme, Melbourne, Australia 2009

8.5 ***AN house*, structure diagram**, Melbourne, Australia 2009

an individually desired world that materialises in the eye of the beholder. A way for a designer to steer these worlds does not lie in materialising 'truth' itself but the context with which it, or its derivatives, can be constructed. Andreas Spiegel suggests that 'The particular meaning that is attributed to a form is the product of a projection, an intuition, a recognition and a reverberation. Against the background of undecidability, the decisive demand for ambiguity becomes a cultural agenda',[6] in particular as the form's ambiguousness is limited by the designer, who channels its reading by taking the audience on a premeditated journey.

The *AN house* is another example of the use of a graphic-focused booklet as a means to structuring the design process and condensing it into a single coherent proposal. The project consists of the addition of a residence to an existing metal workshop and its transformation into a design and photography studio underneath. While initially tracing the design process in the fashion of a diary, the booklet gradually morphs into an Ariadne thread that is used to steer the project's reading and thus gain acceptance from both the clients and the council. Thematically the project picks up on my interest in strategies to densify inner-city fabrics and curb urban sprawl by developing techniques and sensibilities that appreciate unique conditions and realise individual interventions in unfavourable conditions, such as this low-density workshop in a predominantly industrial neighbourhood. Morphologically, the project is another example of an elevated volume that triggers a dialogue with the existing development, or ground, underneath. The resulting gap is large enough to be used as a space in its own right, creating the surplus of a



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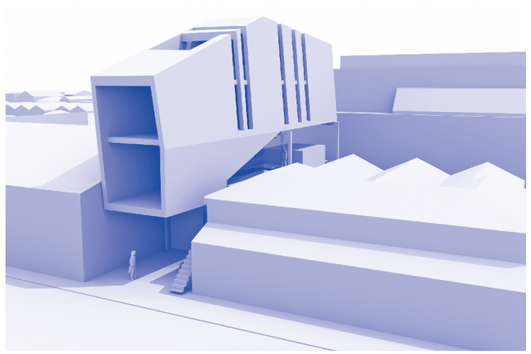

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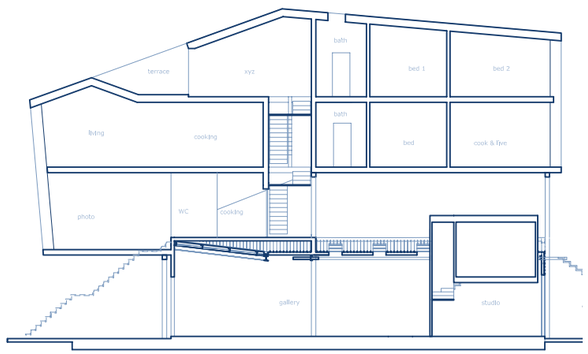

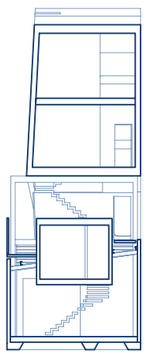

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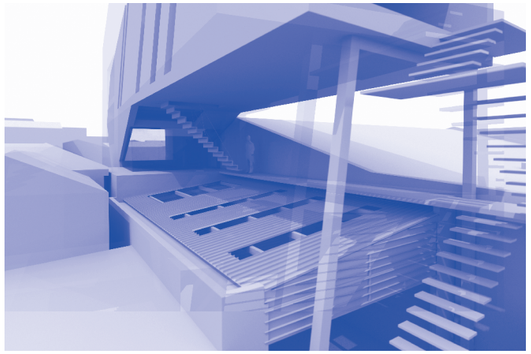


8.9

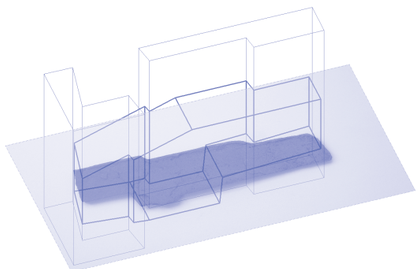
8.6 ***AN house*, sketch model |** showing the void between object and existing structure, Melbourne, Australia 2009

8.7 ***AN house*, digital model,** Melbourne, Australia 2009

sheltered outdoor area that facilitates a natural lighting solution for the photographic studio underneath.

Each booklet starts with defining the format and setting up a design grid in response to whether the booklet will be used for print or digital presentation or both. In the case of the *AN house*, I started by visualising the design's legal context, followed by an array of massing models that explore the project's legal limits and the different approaches that could be taken in response. It is of utmost importance that I enjoy working on the booklet. It is not just a record of facts and actions but a design in itself, which may include references to my personal background (in this case, documentary photographs from my travels to Chile) or topics that relate to the client. In this instance, the client, a food stylist, introduced me to *Meatpaper*,[7] a magazine about art and ideas relating to meat. In response, I illustrated the client's brief in the format of meat charts (the sectional drawings that illustrate where the different cuts come from). Following the design genesis, the booklet gradually builds up towards a visual narrative that illustrates and, through a layer of reflective commentary, explains the design ideas. It keeps track of my various lines of thought and, over time, gradually transforms into a device to communicate the design to my clients and other stakeholders.

Sharing thoughts—I am unsure about the ways in which I can talk to clients about my design processes and motivations, about immersing myself into objects or the sensing space. Assuming an observer's perspective has become a method to interrogate my actions while enabling me to steer the reading of my work. Valerio Olgiati said:



8.10

8.8 ***AN house*, section drawings 1:100,** Melbourne, Australia 2009

8.9 ***AN house*, digital model, Melbourne,** Australia 2009

8.10 ***AN house*, process diagram with found object,** Melbourne, Australia 2009

'I suggest that it is important that you, as the architect, understand clearly with your mental faculties, that as you design a project, this project is not fully understandable by the visitor's intellect. The visitor's mental faculties are unable to completely conceptualize what they experience. If we assume that you were capable of designing a building that can be fully conceptualized by a visitor, your building would – in my opinion – not be worth anything . . . you must understand that your architecture is not fully understandable.'[8]

Olgiati discusses the ability of a finished work to explain itself. I produce a manual to steer the reading of a project's conceptual idea by spinning a yarn that covers those aspects I need in order to convey the project to an audience. Other inexplicable aspects are still present and may be experienced by the user on a subconscious level. Not talking about the personal aspects of my work, protecting them against scrutiny, may be perceived as cowardice as if I am untrue to my own beliefs when I simplify a project into a diagram or a slick narrative to convince the audience. The way I read it is that I use diagrammatic narratives to understand and visualise what is already there, inscribed in my work. The diagram does not produce the work – that is what Bjarke Ingels (BIG) does – but captures what has already happened. I am working from the wealth of the project, extracting and polishing those aspects that allow others to gain access to it. There are multiple ways to understand a project, and I think it is perfectly valid to distinguish between those I pursue in the open and others that one does not share.

A parallel analytic mode of assessment is concerned with testing the conceptual feasibility of a project by viewing it through the eyes of an external observer, aiming to determine a purpose and meaning that are valid beyond my own projections. This step is pursued through the production of graphic representations, a storybook that validates a poetic proposal by arguing it through a different agenda or lens. In doing so, I transfer parameters from graphic design, film and photography into the architectural context and establish form as a signifier of meaning. I consciously differentiate between my own interest in the project and those of other audiences, setting up a narrative along which I seek a project to be read. Graphic representation helps me to reduce a project's material down to its core and organise it in a way that evokes the connotations I desire. It enables me to assess problems from different perspectives and synthesise a meaningful proposal that can be shared with others – making sense. Alternating between two modes of assessment assists in understanding the entire ontological bandwidth and coalesces personal and external agendas within a single project.

Notes

1. Hans Ulrich Obrist paraphrasing the Italian architect and industrial designer Vico Magistretti. Obrist, *Hans Ulrich Obrist Interviews*, Vol. 2, 701.

2. Transcription from an audio recording at a Practice Research Symposium presentation, Melbourne, June 2013.
3. Schoeny, 'Der Drache im Meer', 290.
4. An exhibition at the Vienna Künstlerhaus, where I presented *The Dragon in the Sea*.
5. Fitz and Stattmann, *Reserve der Form*, 9 (U. Bette, trans.).
6. Spiegel, 'Signaturen der Angst', 44 (U. Bette, trans.).
7. http://www.meatpaper.com (Accessed August 9, 2014).
8. Breitschmid, *Significance of the Idea*, 13.

9.1

9.1 *EAF extension*,
artist-in-residence studio,
Adelaide, Australia 2009,
© Daniel Kerbler

Agents | characters

Emerging from my modes of operation and personal agendas is an object-orientated design ontology. Its three agents and the manner in which they negotiate a project's emergence and advancement will be discussed here. Based on the evolution of past work, I will unfold a morphological shift that has become apparent through this research in present work, and foreshadow its development in future projects.

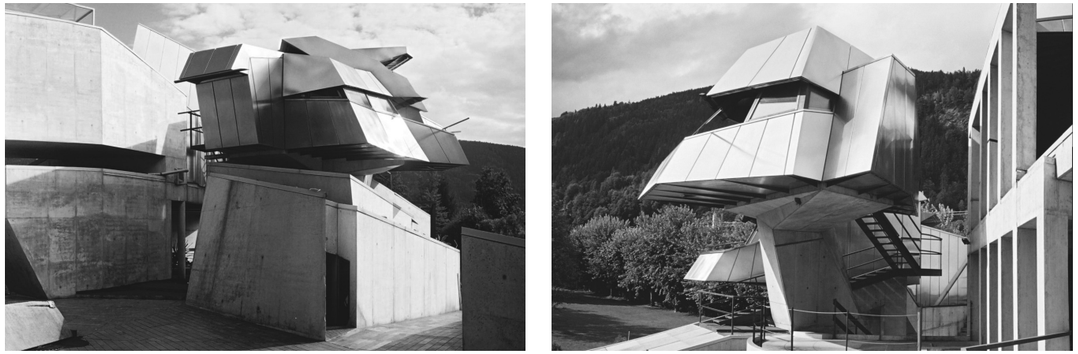
Appearance—Although I deliberately avoid starting with a preconceived idea, form or shape, a taxonomy of my work reveals characteristic familiarities between most projects, suggesting a particular formal order that might relate to the manner in which I work or the architectural habitat from which I come. It appears I am chasing a very particular whale. Most objects appear to be carved from a solid bloc rather than being assembled in an additive manner. Their features are cut from straight or single curved lines that join at obtuse angles, resulting in compact figures that have mass and weight but nevertheless express a sense of agility. Their surfaces are clean, not ornamented, and all openings are created by peeling or cutting away on an all-encompassing skin. There are no grids. Structural elements are either integrated into the building's skin or constituted by internal sub-volumes. The continuous skin, integrated structure and recurring appearance are probably the most obvious features that support the motif of an architectural body or creature. I use the term 'creature' to express the vividness of the architectural objects that populate my work, but not to validate them by prompting zoomorphic connotations of systemic growth. A project's genetic code lies within the author's personal history and experience, and the field of spatial information from which it is extracted. During its genesis, the architectural object gains experiences that turn it into a character that is able to establish its position within the project. Field, object, figure, creature, character – those terms hint at the different stages the project's protagonists go through. At the end, the architectural characters appear as if being at ease with themselves and the places they occupy. At the same time, their physiognomy suggests the potential of movement, of leaving or taking off, which is further supported by the void between them and the ground.

Qualities—Seeking to create a sense of personality within my characters has become a purpose in its own right. Coop Himmelb(l)au established the author as a

legitimate force in the architectural design process. Through their intuitive scribbles, a personal emotion was captured and then translated into built work. They achieved this through the careful observation of the initial material and its uncompromising translation from one three-dimensional representation to the next. Aiming for an authentic and holistic design process, the author is given as much presence as the client or the brief. It is not the iconic object that lies at the centre of my interest, but rather the spatial experience it provokes. I fabricate the characters as agents that prompt a reaction from the site, kick-starting a dialogue from which space unfurls in the void between object and ground. This scheme is characteristic of nearly all of my projects, yet it is not always obvious. At *Uralla Court*, different spatial situations unfold between character and ground, defining carefully laid-out spatial sequences as one transgresses building and site. According to Wolf D. Prix, creating spatial sequences is a particular virtue of Austrian architecture, and for this reason, *Uralla Court* was selected to be part of the Austrian contribution to the 10th Architecture Biennale Venice in 2006.

Designing a sense of personality is interesting because it supports the idea of an active relationship between the building and the user. I think of it as a contribution to sustainability by creating environments with which we can develop a relationship and thus care about. Within the built environment, the discourse on sustainability has been reduced to its functional parameters. One of the challenges I face is how to talk about unquantifiable aspects and qualities of architecture, where it is so much easier and widely accepted to argue for something that can be measured in numbers and graphs. Yet, a building that feels right might be sustainable because it is loved – in the way it smells, looks and behaves – and thus will be taken care of and given an extended lifespan, effectively reducing the embodied energy consumed by society. But how does one communicate and prove experiential qualities in advance when they only reveal themselves in the final built work? My personal way of assessing the quality of a project beforehand is through sensing the sculptural qualities of the items I handle. They must feel right. I believe that a carefully treated model, one that in itself has a presence and an aura, is my best tool for determining and maintaining the quality of a design during all stages of the design process, and carrying it right through to the built work.

Structure—Parallel to the sculptural qualities of a project, I am committed to all its functional aspects – programme, structure, circulation, services and so forth. Yet, I am not interested in signifying those. What I am interested in are the poetic elements that transcend the prosaic. I like a building to be an inhabitable sculpture with the embedded surplus of programme. Mathias Boeckl explains that in Günther Domenig's work, the 'mechanic functionality of the design . . . is permanently brought into accordance with the semantic level'.[1] I try to do the same, continuously revising form and technical requirements until they



9.2

9.2 **Günther Domenig, *Steinhaus*, residence and event venue,** Steindorf, Austria 1983–2012

coalesce. Unlike Domenig, however, I do not want the attention to technical aspects to be readable. I avoid exposing mechanic and structural components by integrating them into the space-defining elements of the building. The attention to those aspects is only witnessed in the tedious process of tweaking both form and technical solutions until they fully accommodate each other. This process is part of transforming the initial figure into a complex architectural character. The careful thought-about structure and its integration into the space-defining elements is evident in the structural models and diagrams that I produce. Conceiving structural solutions in a manner that supports the architectural concept and its expression was conveyed to me by engineer Professor Klaus Bollinger, who teaches structural engineering at the Angewandte in Vienna.

Solids—The formal similarities shared by many of my projects may evolve from the manner in which I work, starting from solids and working upon them in a subtractive manner. When I cut away material from a block – be it physically with a Stanley knife or digitally with single curved lines – I tend to cut at shallow angles along the edges of the form, resulting in stocky convex shapes. After the shape of the solid is defined, it is shelled, penetrated for openings and inserted with sub-volumes. My intention is to realise a character's formal appearance and spatial sensation with the smallest possible effort, trying to 'concentrate forces in a minimum number of points'.[2] In the process of developing form, the initial overload of information is being boiled down, distilled and concentrated to its essence, until no further simplification is possible without compromising the

9.3

9.3 **Bette/Brünner,** ***Unreasonable topographies***, installation, Port Adelaide, Australia 2012

spatial experience or sculptural quality of the work. Throughout the course of a design, I continuously step back from solid mass models and go through the process of shelling, positioning fenestration and structure again and again. Through this process, an already visually satisfactory form is fine-tuned in order to simplify its geometric definition and have it coalesce with any technical requirements. In doing so, I have the implementation process in mind, which I do not want to complicate with geometric complexities that are unnecessary for the spatial sensations I wish to achieve.

The Spanish sculptor Eduardo Chillida notes that 'almost everything can be resolved by taking away'.[3] A subtractive

mode of working is inherent to stone, while steel is generally handled in an additive manner, where complex works have to be composed of individual parts. Yet, even while working additively in steel, Chillida achieves the notion of subtraction and the emergence of space. I assume that his statement above relates to the conception of his work rather than its implementation. This is of interest to me, as buildings are always composed in an additive manner. Similar to Chillida, I want the object to appear as a single entity, and thus I try to avoid the differentiation between individual elements such as the façade and roof. My projects often proceed from an agglomeration of spatial artefacts. In order to turn this into a subtractive process, I encompass this field of information with a virtual solid, at which I chisel away while being guided by the traces in the background. The virtual solid acts as a three-dimensional yellow trace on which I consolidate my form.

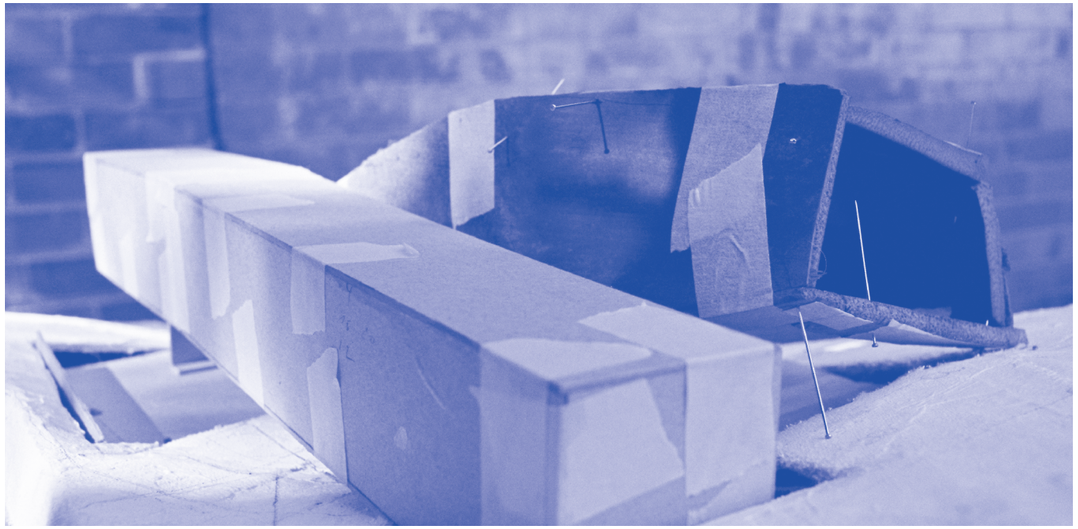
figure | character | space—While extracting a single object from an overload of information, my own predisposition kicks in, steering me towards the materialisation of yet another creature that belongs to my personal taxonomic family – one that will soon become an autonomous actor on the city's stage set. The emergence of a figure from a field of mere material defines a limit value. The lack of initial intentionality and cultural determinacy allows the designer to see anew and establish connections across the borders of disciplines. Unbound by existing references, the object negotiates its own laws of engagement. Finding the figure/creature is both an interpretation and a projection. The move seeks to recognise an object's latent qualities and uses its individual affordance to propose new forms to act and live. The resulting performative surplus is used to gain acceptance for the project. For me, a design starts to make sense when the figure displays enough character to exist by itself and radiate space. Being able to give it a name marks a limit in the process. At this point, chaotic mass is turned into a higher order of complexity, and meaning is assigned. The design's qualities become recognisable and distinguishable. Thus, the object becomes a character. One could say that the naming indicates the Frankenstein moment of a project when the creature opens its eyes and becomes alive. This is not to be mistaken for lifelike, as I do not want to allude to biological analogies or genetic codes that steer the design process.[4] It appears as if I am object focused. Yet, the object is only a means to an end. My personal interest lies in the 'space that is implicated in the work and the space that surrounds it'.[5] In order to accomplish space, I need to focus on objects first. Space is an ungraspable quality; it cannot be achieved instantaneously or without solid matter that either frames or incorporates it. I choose to put my energy into form, from where it radiates back as space.

Formal complexity—An important question is how simple can a form be and yet still carry enough information to create space? Looking at the next ENTERprise (tnE) Architects' *Lakeside Pool* (2006), I find it in parts geometrically too complicated for what it spatially accomplishes.

9.4 **Eduardo Chillida,** ***Meeting Place III***, Madrid, Spain 1972, © Virginia Duran

9.4

I love this project, but if it were my work, I would have tried to achieve the same level of spatial effect with less topographical articulation, fewer folds and incisions. tnE and I both value serendipitous finds within a project's beginnings. Yet, while tnE try to maintain as much formal complexity as possible, carrying it through the design development and into the final product, I try to condense a spatial situation through formal reduction. In this regard, tnE are closer to Coop Himmelb(l)au, who also try to stay true to their first sketch or model, maintaining all its aspects, even flaws and inaccuracies. For me, geometric opulence hinders the sensing of space. Therefore, formal reduction is necessary. However, this needs to be carefully balanced, as the

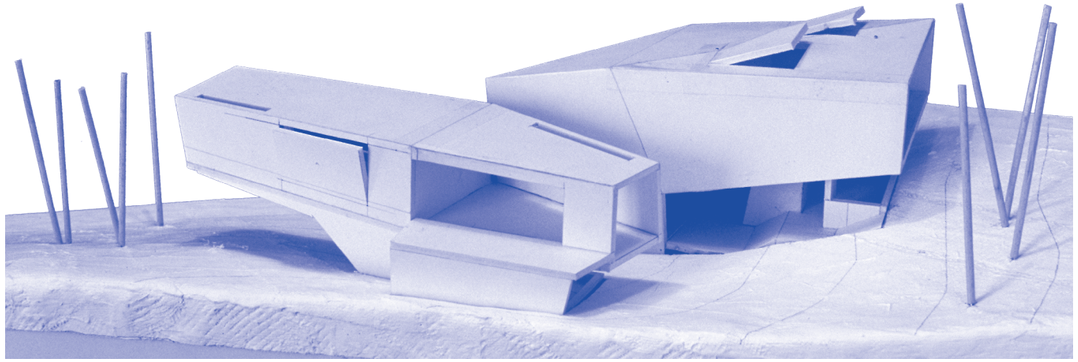


9.5

9.5 ***Uralla Court***, **sketch model |** bark, cardboard, plaster, South Australia 2004

inversion of the argument – space through simplicity – is not valid. Once a form has been found, one that carries both space and cultural surplus, I test how its qualities can be achieved with the smallest possible hassle for implementation, meaning that great care and effort has to go into the design development and documentation.

Sensing space—The crafting of the character happens in a hybrid environment that oscillates between physical and digital production. Working in both media gives me the most holistic access to a project's qualities, and enables me to witness the moment when it turns from mass to figure to character. Depending on the project, this moment can happen in either medium. However, I am more confident in assessing physical outcome. While working on the material, at one point, the figure starts to radiate energy, indicating the moment it becomes a character. This is the moment I work for. It is impossible to predict the occurrence, and even in hindsight, it is hard to pin down, as the longer the incident has passed, the more it becomes blurred by post rationalisation. For the *EAF extension*, this moment happened while I was carving a block of styrofoam. I was taking away chunks of material, which left me with two connected volumes and a downward pointing



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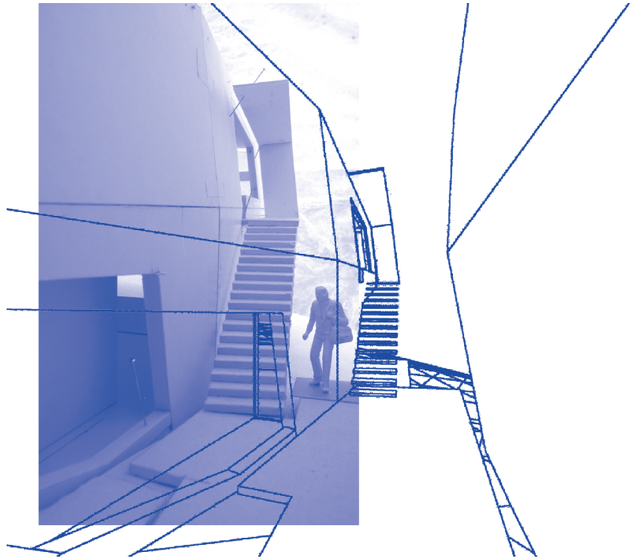
9.6 *Uralla Court*, foam core model 1:100, South Australia 2004

outrigger. The form in my hand started to develop a presence and conveyed the physical feeling of joy. Maybe it is the physical expression of a hunch that is lurking in the background, telling me that there is something extraordinary about this form and that I am on the right track.[6] At this moment, I do not yet know which particular qualities have evoked my perception of joy. I then halt the design process and switch over to viewing the design from an outside perspective, imagining an external observer trying to rationalise the work. Only then came the insight that linked this specific form to the air-conditioning units found on top of surrounding buildings, which until then had no significance to the project. Only at this point, in conjunction with an unplanned form, was I able to make a connection and see a way to argue for form, concept and a potential programmatic surplus.

Conceptual affirmation—An affirmative step is reached when the envisioned scenario can be successfully communicated. I produce different frames of reference, independent of my own agendas, to test the architectural character in a world concerned with quantifiable measures of performance, logic and reason. From there, including my own agendas, I establish a holistic conceptual proposal. Chillida

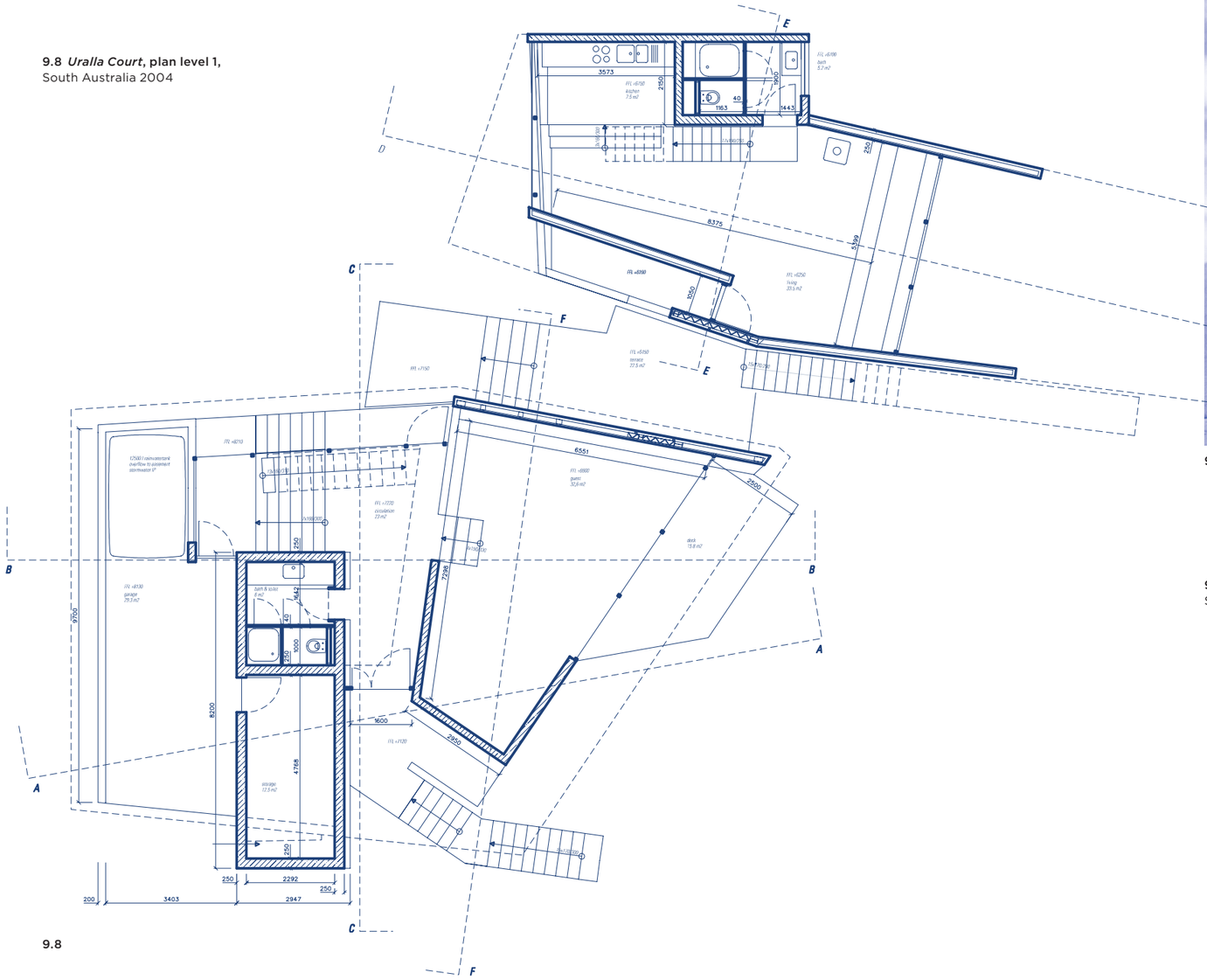


9.7

9.7 *Uralla Court*, model and drawing, South Australia 2004

has called this the synthesis of a double discourse between intuition and reason, 'where both work together, playing out tensions – one against the other – in order to reach an equilibrium'.[7] With the *EAF extension*, the creature itself became an accomplice that drew attention from the quantifiable aspects to the poetic. Its balanced personality makes everything look easy, as if the project had always existed, appearing natural in its habitat. The character does not speak of functional parameters or requirements, it just solves them. The same happened at *Thalia Graz*, where the relationship of object and ground was developed in a process of iteratively tuning the formal and the functional parameters, and simultaneously being alert and responsive to evolving phenomenological experiences. The continuous and all-encompassing skin at *Thalia Graz* and the *EAF extension* reminds me of the more organic work by Günther Domenig, in particular the refectory in *Graz Eggenberg* (1977), which he designed in collaboration with Eilfried Huth. The morphology of the building gives it a creaturely appearance, reminiscent of a caterpillar or a stingray. During the design of *Thalia Graz*, we were reminded of a lizard crouching on top of the existing buildings. This image informed the way that we tested different façade treatments and materials, including shingles as an analogy to the lizard's scales.

Uralla Court—The project exemplifies the recurring theme of developing a performative relationship between architecture and topography, by introducing an alien object to an unsuspecting landscape. The qualities of the ad hoc pairing were assessed and then cultivated through the mediation of a dialogue between object and ground, creating unforeseen instances of spaces and domestic life that unravel in between. The project's formal independence, in a topological and cultural sense, is the result of negotiating the above dialogue with an intense consideration for the brief and the qualities of the location itself. By acknowledging the slope, the existing landscape remains present throughout the project, the terrain being 'echoed' in the different levels, allowing space to flow unhindered from the outside topography to in-between the inserted upper volumes.



9.8 ***Uralla Court***, **plan level 1,**
South Australia 2004

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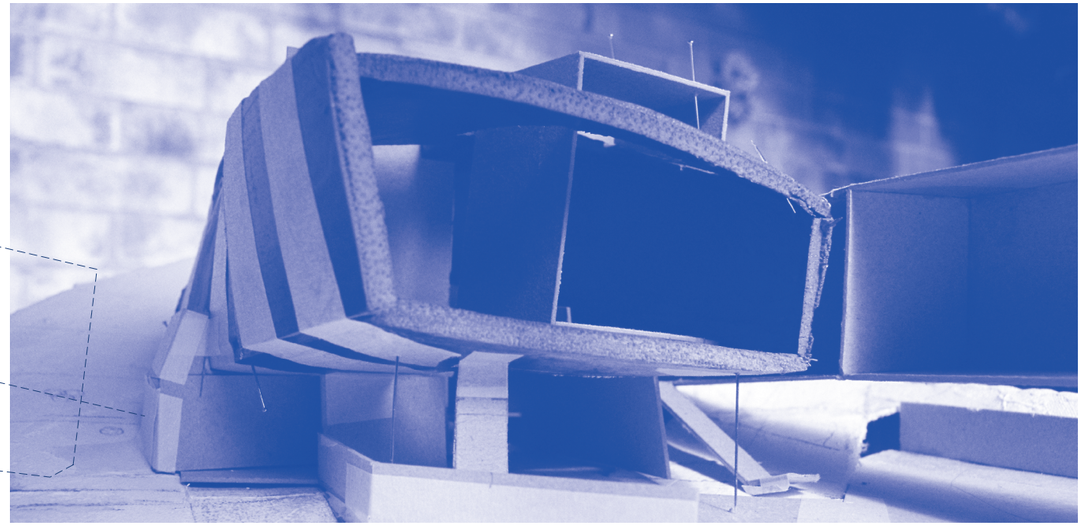

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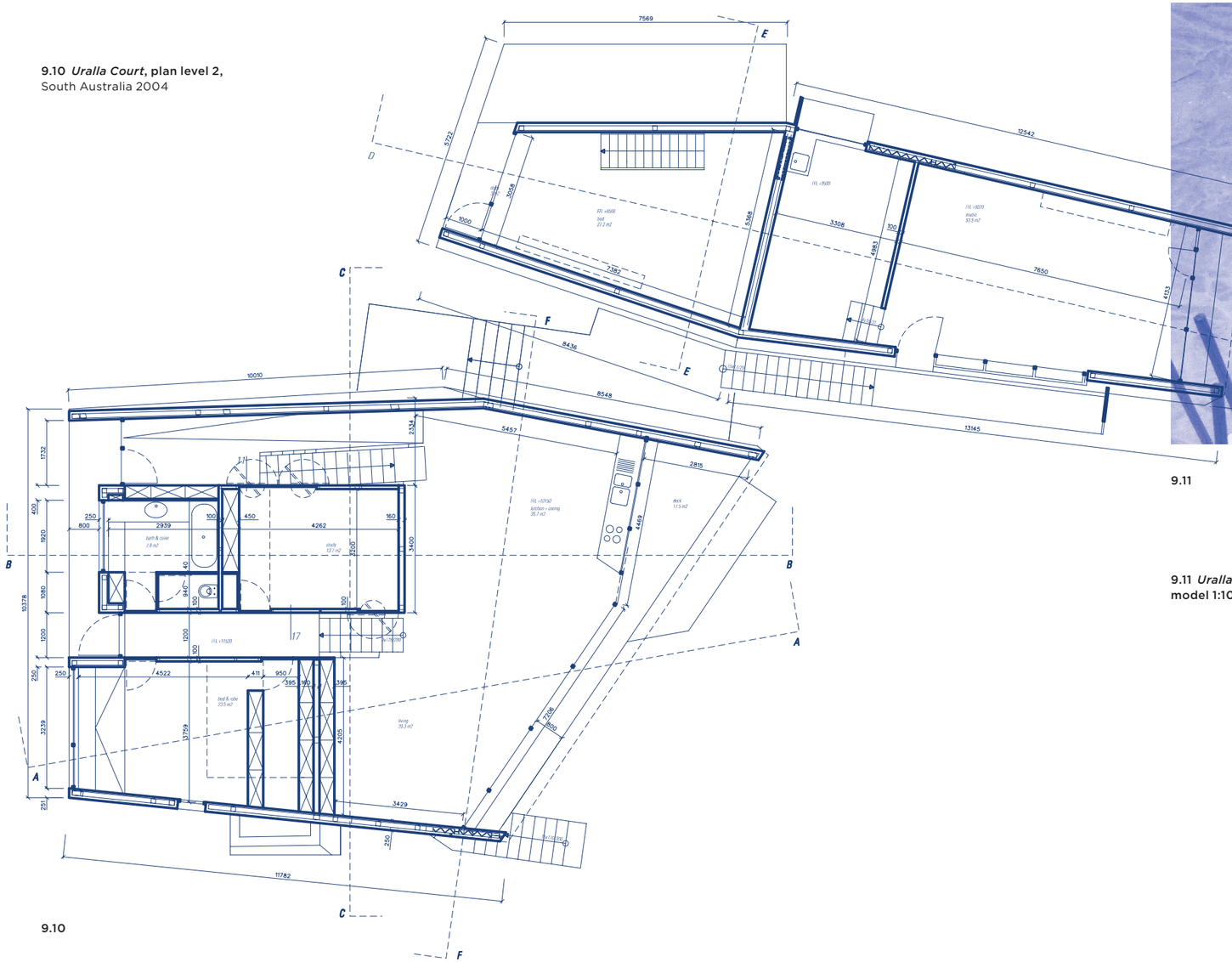
9.9 ***Uralla Court***, **sketch model,**
South Australia 2004

Similar to the characters' external appearances, there are recurring spatial configurations on the inside. At *Uralla Court*, internal sub-volumes hover above split-level surfaces,[8] similar to the way that the character itself hovers above the ground. They are like organs within the body, independent units that are fused to the circulation and the outside skin. The inserted cubes are a reference to the hanging box in Peter Wilson's *Suzuki house*. I am intrigued with the way that Wilson managed to create a continuously flowing space, similar to a 'Loosian' Raumplan, within the extremely confined envelope. *Uralla Court* was designed as a mix of both residence and workplace. The motif of bodies within the body results in an internally defined spatial sculpture that offers a range of different spatial situations, and sets out a way of living and working in which personal freedom and the opportunity to choose play an important role. The occupants can decide between different atmospheres, paths and spatial situations which determine the degree of interaction with the other or the intensity of thought over work. There are areas where the space flows and moves and others that are stable, interweaving various purposes and creating different sensations. Distance and openness interact with narrow ravine-like



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9.10 *Uralla Court*, **plan level 2,** South Australia 2004

9.11

9.11 *Uralla Court*, **foam core model 1:100,** South Australia 2004

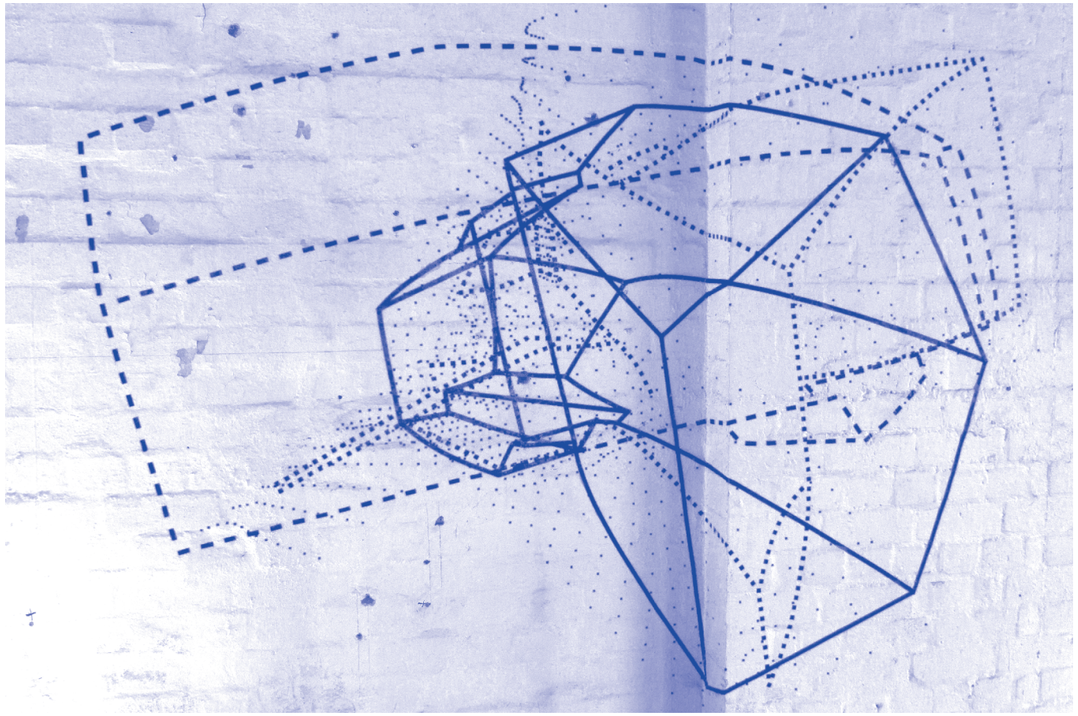
gaps, just as extroverted zones interact with sheltered niches and closed units. The whole house is a dance around open shelter.

The design unfolded from the client's situation at the time – living in Germany and wanting to settle in Australia – and takes their immediate needs upon arrival as its point of departure. The first stage, the main residence, resulted from translating the vessel, in which they travel and store their European history, into an imaginary vehicle that lands in Australia. On site, it is jacked up, hovering above the ground, waiting to develop a relationship with the ground or being ready to take off again. In the second stage, a dialogue between object and ground unfurls, and the site's reaction was anticipated and recorded through sketch models that articulate its topographical changes. The vessel reacts and retracts some of its internal volumes, resulting in a hybrid project that is equally composed of both the architectural object and the site.

Looking back at my work reveals a choreographed genesis, in which the architectural object gradually materialises from field to figure to character. In its course, the overload of information is being distilled down to its essence until no further simplification is possible without compromising the spatial

9.12 ***Uralla Court*, residence and studio** | showing the lifted mass and subsequent ground reaction, South Australia 2004, © Daniel Kerbler

9.12



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9.13 *Spinoza's Cabinet*, tape drawing on wall, Adelaide, Australia 2012

experience or sculptural quality of the work. At the same time, I am committed to incorporating all technical aspects, however, without making this explicitly visible. My aim is to endow the object with a sense of character and personality, enabling an active relationship between the building and the user. It is my belief that buildings that are loved and taken care of manifest a valid contribution to sustainability. *Uralla Court* is the foundation project for the character–ground topic that is present in most of my work. Different from later projects, the character is more open to spatial flow between inside and outside. The interlocking surfaces of object and ground offer a higher diversity of spatial situations and experiences, which have been lost in more recent projects, where my aim was focused on giving the object 'presence' and radiating space. I wish to address this in future projects, by adding another operation at the end of the proven process, one that opens the volume up again and facilitates the flow of space between object and ground. The proposed title for this strategy: *Dissecting the whale*.

Notes

1. Boeckl, *Günther Domenig: Recent Work*, 28.
2. Puga, Hiche and Radic, *Cecilia Puga*, 13.
3. Chillida, *Eduardo Chillida: Writings*, 16.
4. R&Sie are one of the few practices that successfully transcend explorative construction science and produce architecture by coupling systemic form generative processes with speculative cultural scenarios. Their utopian project, *I've heard about*, not only projects the technical possibilities of an automated urban growth process, but also discusses its socio-economic consequences and the responsibility of the individual (architect) in a society, to question the prevailing production of wealth through control over the ground and building construction.
5. Chillida, *Eduardo Chillida: Writings*, 11.
6. Reminding me of 'The Architect as Seismograph', the topic of the Architecture Biennale in 1996, curated by Hans Hollein.
7. Chillida, *Eduardo Chillida: Writings*, 29.
8. See fig. 9.12, 10.5 and 10.8.

10.1

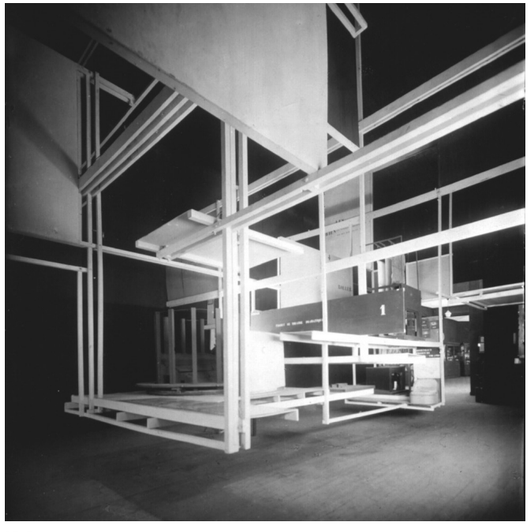
10.1 *Uralla Court*, residence | void between building shell and inserted volumes, South Australia 2004, © Daniel Kerbler

Agents | space

The way in which different forms of space materialise in response to separating the architectural object from the ground is discussed in relation to my architectural coinage and the processes I employ to generate form and cultivate the mysterious nature of space.

Defying gravity—Lifting the architectural object differentiates it from the ground and establishes it as an independent entity. At the same time, the move creates a void where different occurrences of space are negotiated. Leaving the object hovering and not touching the ground follows a consistent choreography that is only slightly altered from one project to the next. Over the years, this has resulted in a formal language that discusses the placement of objects in relation to each other and the ground. The picture of the leaping whale is a brand mark that many of Wolf D. Prix's students carry. The image, in conjunction with Prix's repeated quotations from *Moby-Dick*,[1] epitomises the essence of man's struggle with the elements and transcends into the 'irrational battle against gravity',[2] continuing Austrian expressionism's 'human struggle against the powers of fate'.[3] The photograph of a whale lifting itself up, out of the water and into the air, proves that gravity can be overcome, even if just for the moment and with great effort. Overcoming one's own weight is the point. The mantra of the leaping whale has been repeated again and again in order for us not to lose faith. If the whale can do it, then we can as well, given that we are prepared to overcome ourselves and invest in the effort. Prix set this up as a goal for his students, and we are all trying to prove ourselves.

Lifting the mass is not an invention of Coop Himmelb(l)au. 'Like all architects everywhere, Coop Himmelb(l)au loves to wrestle with Newton's gravity, architecture's best friend'.[4] Friedrich Kiesler's *City in Space* (1925)[5] is a visionary model for a city hovering above the ground, which could be described as the Austrian founding moment for the desire to counteract gravity. Dieter Bogner points out that the motif of hovering is also present in Kiesler's *Nucleus House* (1931), *Space House* (1933) and early versions of *Endless House* (1947–60).[6] Constant Nieuwenhuys lifts up an entire city for the *New Babylon* project (1950–60); Hans Hollein proposes *Superstructures Above Vienna* (1960) and a *Communication-Interchange City* (1963), both hovering above existing cities. And while Günther Zamp Kelp in *Architecture School* (1965), Laurids Ortner in *47. Stadt* (1966) and Wolf D. Prix in *Wohnhausanlage* (1966) propose the detachment from the



10.2 Frederick Kiesler, *City in Space*, Paris 1925 | proposal for an endless city, © 2014 Austrian Frederick and Lillian Kiesler Private Foundation, Vienna, Austria

10.2

ground in their student projects, Lina Bo Bardi already realises the lift with her *Sao Paulo Art Museum* (1968) above a public plaza, suspended from two massive concrete frames.

In the foreword to *Get Off of My Cloud*, Jeffrey Kipnis points out that lifting the mass is not an end in itself. Instead, it stands for the liberation from the repressive machinery of power associated with land ownership and control over the ground plane. Kipnis links Himmelb(l)au's desire for independence from the ground plane to Corbusier's dictum 'Architecture ou Révolution', stating that Corb's and Mies' lifted platforms are an 'assault against the primacy of the ground'[7] and a first step towards the democratisation of the ground plane. Building on this lineage, Coop Himmelb(l)au's work 'does not just deal with feudal control but also with the regulatory systems of architectural planning'.[8] This is masterfully demonstrated with their *Rooftop Remodelling Falkestrasse*, where they declare the architecture as a piece of art, thus exploiting a loophole within the council's legal provisions and allowing the development to proceed where the building code would otherwise have inhibited it. For Coop Himmelb(l)au, the conceptual solution of a problem is not enough. They are not a theoretical practice that is satisfied with

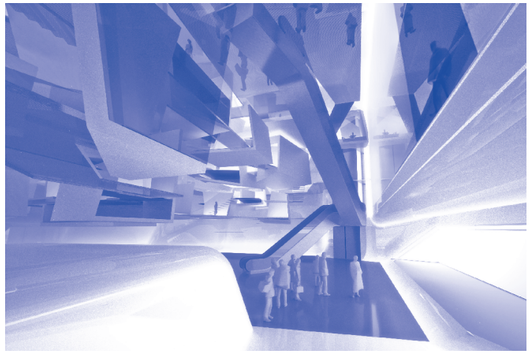
the mere representation of an idea. Instead, they physically build and give experiential evidence of what can be achieved if one is prepared to go above and beyond.

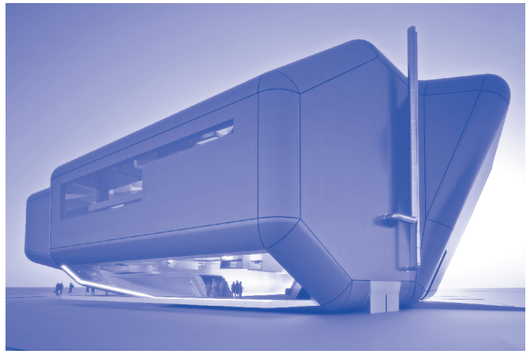
Lifting the mass responds to my Austrian coinage and the tacit expectations that come with it. Opposing the gravitational pull and following an object-oriented ontology establishes the architecture as an independent body with a life of its own. It becomes an actor for whom the city or landscape are a stage set as well as a partner in an ongoing dialogue. A negotiation process of pushing and pulling unfurls – one that defines both protagonists' specific attributes and establishes space between them. 'In-between' is where I extend upon the coinage of my mentors and establish my own line of inquiry, when I make a pact with the ground (sea) and turn it from a backdrop into an actor in its own right. The whale not only leaps, but is also being lifted, giving evidence of a dynamic negotiation of forces amid the object–ground relationship, and turning the void between them into space along the way.

Proof lies in the doing—Similar to Himmelb(l)au, I seek the validation of my aims through built work. The experiential evidence I am looking for lies in the space that can be experienced flowing in and between the volumes of the built form and the ground, where the continuity of space meets the continuity of the landscape. In an ideal set-up, I imagine the space between object and ground to be a spatial knot, whose loose ends branch out in all directions. Here, I am looking for a fusion of different instances of space: 'interior' space, implicated by the overall form and its internal sub-volumes; the space 'between' those volumes and the ground; the space that both character and ground 'radiate' through their presence; and 'sequential' space flowing through the project. Chillida describes three different forms of space in his works: (1) space as an energy that a place or object radiates, (2) the space between objects and (3) the space within an object. The space 'within' is defined by the object's outer limits, its shell, which also feeds the object's aura, its radiance. Chillida wrote:

'There is a problem throughout the majority of my work: interior space, at the same time consequence and origin of positive exterior volumes. To define these interior spaces, it is necessary to contain them, thus making them inaccessible to the spectator who is situated on the outside. Interior spaces, which have always been problematic for and interesting to architects, tend to be three-dimensional spaces defined by two-dimensional surfaces. I aspire to define the three-dimensional (hole) through the three-dimensional (plane), simultaneously establishing a type of correlation and dialogue between them.'[9]

In my design process, radiant space occurs when the object has been developed in a manner that turns it from figure to character. It then emanates space in the form of an ambience. The ground itself can emanate space when, through the dialogue with the architectural character, it becomes activated and expresses its own qualities and desires. Character and ground describe



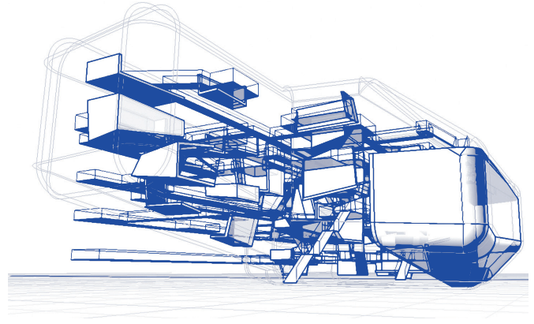


10.3

10.3 **Bette/Ott-Reinisch, *Expo Pavilion* |** Shanghai, China 2008, © Daniel Kerbler

space with their physical limits. At the same time, they radiate space in the form of an atmosphere that charges the void between them. This is the archetypical script for my projects. The plans and sections for *Uralla Court* illustrate this dynamic.[10]

Sensorial experiences—Physical and radiant space is interconnected. Yet, the unity of multiple spatial situations, its flow, is not graspable at once, but only becomes present through imagination following a sequence of events over time. For me space is dead – a mere void – when its configuration can be understood from a single vantage point. It is alive when time and movement are needed to gain an understanding of spatial situations that nevertheless maintain a certain mystery – walking through a building and never actually reaching the point where everything is understood is the ideal. At this stage, the building begins to reach the complexity of natural environments without mimicking their formal appearances. In my work, I try to offer as many spatial situations and choices as possible. This is my role as an architect. I organise programme and brief with the aim of offering a surplus in the form of extended perceptions and experiences, similar to what we might encounter when wandering through a forest or a mountain side. Today, when cities are growing at the expense of natural environments, therefore limiting our experiential bandwidth, architecture will have to give back and increase its complexity and richness to provide sensory stimulation. When walking through a canyon and up a ridge, there are many things happening at the same time. In order to provide a similar richness within the built environment, architecture cannot be conceived as a backdrop, but rather needs to offer experiential opportunities and be disquieting in the most positive sense.

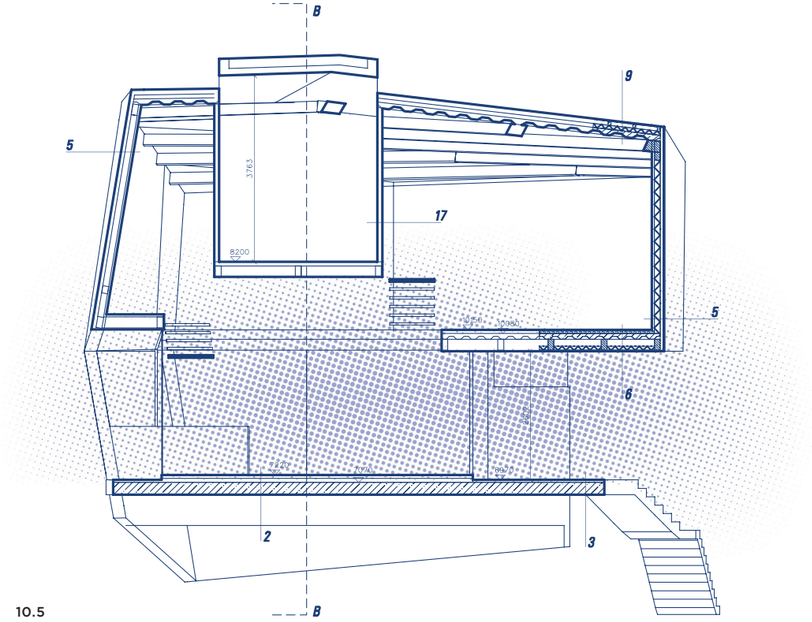


10.4

10.4 **Bette/Ott-Reinisch, *Expo Pavilion*, digital model |** x-ray view of internal volumes, Shanghai, China 2008

Instances of space—The weighting of different forms of space (radiant – interior – between – sequential) is different in each project. At *AN house*, *Thalia Graz* and the *EAF extension*, radiant space is dominant, while *Uralla Court* and *Uralla Court II* achieve a more even overlap of different instances of space, with an inclination towards sequential space. They are the first projects where the ground not only expresses itself through a changed (activated) topography, but also creates interior spaces, in this case a bathroom and storage area. This also happens at *AN house*, where the existing building produces an isolated bedroom pod that develops out of the existing workshop's roof and pushes towards the newly landed character. Similarly, at *WIFI St Pölten*, the ground bulges and creates room for workshops and teaching spaces. In some cases, a project revolves solely around radiant and interior space. This happens when for logistical reasons the ground cannot be altered. The Austrian *Expo Pavilion* (2008) was intended to be moved from one location to another, effectively taking the unique qualities of each ground out of the equation. Our proposal envisions a large resonating body that contains 63 interconnected sub-volumes, bodies within the body, each of which houses an instrument collected from a particular area in Austria. When played and interacted with, the instruments would release information about the regions they came from, presented on the inner skins of the pavilion. The outer shell refers to the flight cases used to transport string instruments securely, and thus emphasises travel and journey. The array of 63 bays forms a labyrinthian network waiting to be explored in the manner of a 'situationist derive'. Although the main character was not able to build a relationship with the ground, the spatial relationship between the individual sub-bodies and their environment (the main body) was carefully negotiated. A different example is the installation piece for the exhibition *To the Islands* (2011). Here, the object's genesis started in one context (Port Adelaide), but then it was transferred to another, the exhibition space, where it developed further in response to the context. Due to the fact that no alterations to the gallery were allowed, the dialogue between object and ground could only manifest itself in the character itself. Since the ground nevertheless affected the object's development, I refer to this scenario as the ground's 'silent activation',[11] expressed through the formation of the character and the space around it.

10.5 *Uralla Court*, **section CC** | spatial flow between volumes and ground, South Australia 2004



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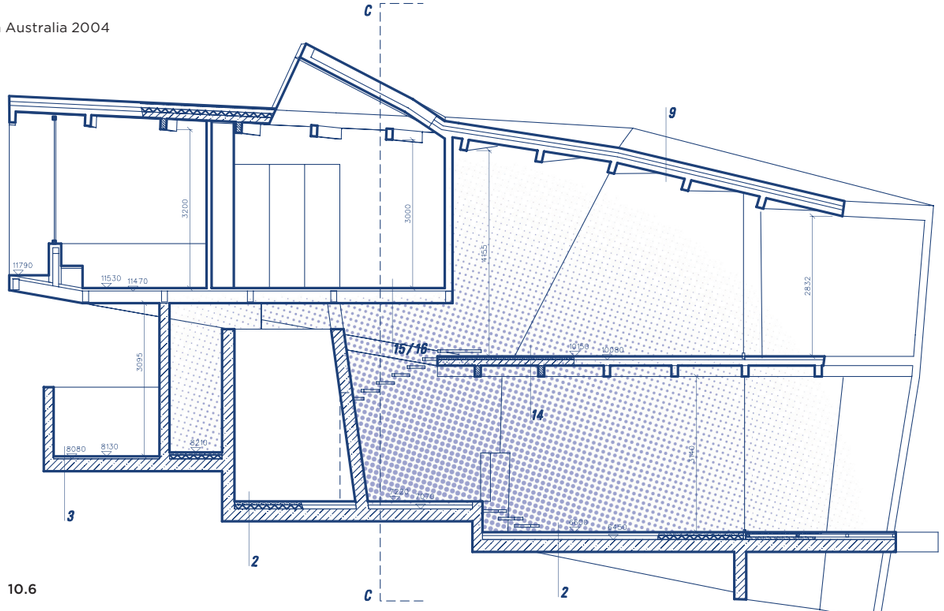
10.6 *Uralla Court*, **section BB** | South Australia 2004



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Places that are loved—I use the term 'space' to describe the atmosphere that a particular Euclidean geometry emanates. This can be an object or a void that is framed by multiple objects. For me, space and atmosphere are nearly identical. Yet, while atmosphere can also be produced by social interaction, space is determined by the ambience of objects in relation to one another and the observer. Space revolves around the subjective experiences that unfold between object and subject. In order to design architecture that evokes feelings and sensations, I believe that we should acknowledge the use of emotional affects in the creation of architecture rather than only accepting them in the perception of space in built outcomes. Taking this approach further, Margit Brünner works with the affect 'joy' as a constituent material agent, suggesting that 'atmospheres precede matter, including built environments'.[12] How, if not through subjective assessment in the act of creating a design, can we probe a socio-political environment in which architecture is primarily perceived as a commodity, whose evaluation parameters revolve around expectations of efficiency and quantifiable performance? Why should architecture be reasonable? Are baroque churches reasonable? Do they need to be? I believe that the experience of joy and surprise has to be reintroduced, not least for reasons of sustainability. Acknowledging the role of the subjective and emotional in architecture supports the idea of an active relationship between buildings and their users. A building with personality is more likely to be identified with and appreciated for the way it feels, looks and behaves. In *Human Space*, Bollnow states that despite the secular times and lasting efforts of turning our dwellings into rationally determined 'machines for living', they retain a sacred character, a 'special sense of emotion' that links to the 'unresolvable remains of archaic life'.[13] This engrained 'spatial intelligence' (van Schaik) influences our perception and well-being in the places we occupy. Bollnow goes on to describe that beyond providing physical

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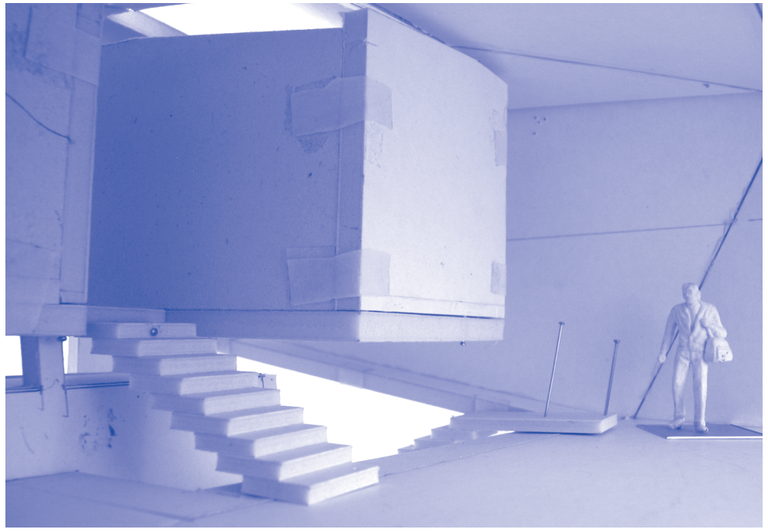

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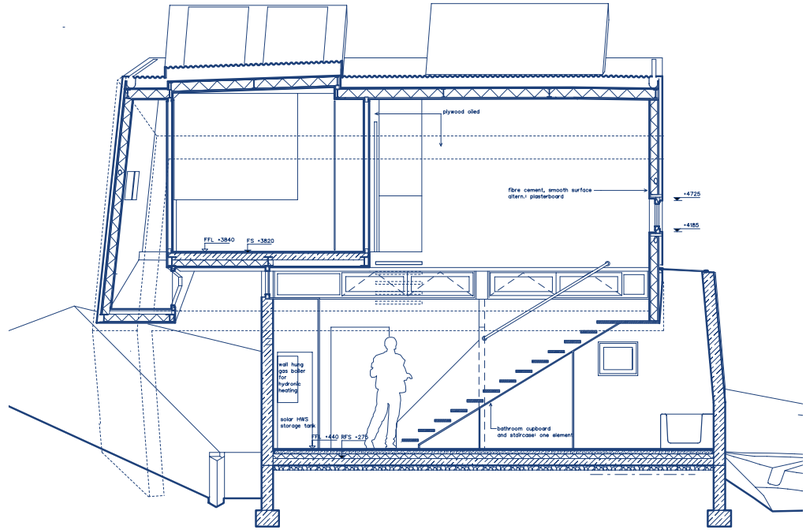


10.9

10.7 *Uralla Court II*, **working model 1:100,** South Australia 2006

10.8 *Uralla Court II*, **working model 1:50,** South Australia 2006

security and thermal comfort, our well-being in a space is also determined by the perception of the lovingly care it receives.[14] This unquantifiable 'soft' factor of affection feeds our physical environment, enabling, through care, its durability and thus effectively contributing to a more sustainable environment.

Pelsmaker and Kroll describe how this 'soft' factor, the relationship between occupants and their dwellings, has become part of the heritage discussion:

'In conservation, this broadening consideration of "living cultures" or "living heritage" also constituted a shift in focus from the physical appearance of the building to give more consideration to non-physical, living aspects – cultural and social ones for example – essential to the lives of those occupying the buildings . . . sustainable retrofit is not only about making buildings airtight and energy efficient, but also about how it can generally serve its target user group and local community.'[15]

Charging the void—In my practice, ideas are created by tinkering with form until I am satisfied on two levels. The first level is my own aspirational desire to promote

10.9 *Uralla Court II*, **cross-section 1:50,** South Australia 2006

the emergence of space, nurtured through mindfulness in the design process. The second level is the acknowledgement of an observer's agenda, conceptualising a project in such a way that its values are communicable and shared with others. While the second level is subject to logic and reason, and thus relatively easy to evaluate, the emergence of space is more ambiguous and unquantifiable. The question arises: what are the indicators of space? For me, carefully modelling and sculpting form introduces an energy that takes possession of the object itself. The object starts to glow; it radiates a presence and thus emanates space. When two objects emanate space, the area between them is charged and turned from mere void into space. Although an immaterial body, the void radiates space in the form of its own presence and atmosphere.

In the absence of commissions for larger buildings, activating the ground has become a strategy that enables me to substitute missing volume and establish the ground as an antagonist to the architectural object. The creation of space results from a standoff between the radiant energy of the objects, the ground and the accumulated tension in

10.10

10.10 ***Uralla Court*, residence |** inserted volumes hovering above the upper floor level, South Australia 2004, © Daniel Kerbler

the voids between. Sculpturally honing the object and the ground brings me towards a balance between those three forces. While handling the objects, the gradual transformation from void to space is indicated by a bodily feeling. Sensing the emergence of space is perhaps an evocation of past experiences, referencing my personal spatial intelligence. This alludes to the question as to whether the perception of space is purely individual or based on a common conditioning, and whether it could therefore be experienced and shared with others. Leon van Schaik suggests that a shared valuation of space is determined by evolutionary and cultural conditioning, giving evidence of our prehistoric past as hunters and gatherers and predisposing the types of landscapes in which we feel comfortable. Similarly, the communities in which we grew up, or the professions with which we choose to associate, may have formed our spatial preferences and repertoires. I believe that there is also an aspect that can be communicated across cultural boundaries: the presence that a space emanates as a result of the investment of energy and care in the making and maintenance of its defining elements. Subsequently, the perception of space is based on a projection – one that is evoked by specific formal relationships or objects to one another. I believe that space only exists when it is perceived, and otherwise remains a Euclidean geometry. Through constructivism and second-order cybernetics, we understand that the senses with which we assure ourselves of the world around us are an inseparable part of the observed. Therefore, 'space', as a qualitative and cultural assessment of geometries, is the construction of an individual observer. The process of manufacturing geometries that facilitate the emergence of space is dependent on the modeller's embodied spatial intelligence. When I am handling form, my spatial intelligence expresses itself as a bodily feeling that I refer to as emotive cognition, steering the design process and indicating when to halt.

Lifting the mass is a principal strategy within my design process that I have adopted from my architectural mentors and developed further. One of its main purposes is to facilitate the emergence of space. Instead of shaping the geometries that evoke the experience of space directly, I introduce an alien object to the site and keep it hovering at a distance above the ground. This creates an undetermined territory between the two protagonists, whose relationships have yet to be negotiated. The unrelated object provokes a reaction from the ground which leads to a dialogue unfolding in the void between them. This exchange is mediated by the designer, whose own projections and interpretations become part of the process. Through empathy with both actors, their inherent characteristics are voiced and translated into form. The care and attention paid to expressing the final agreement between object and ground is present as an energy – one that is emanated by the protagonists and that charges the void between them. At this stage, the design process is halted. It is from within the void that different forms of space emerge as a consequence of the staged antagonism between object and ground.

Notes

1. '. . . would now the wind but had a body; but all the things that most exasperate and outrage mortal man, all these things are bodiless, but only bodiless as objects, not as agents'. Melville, *Moby-Dick*, 556.
2. Chillida, *Eduardo Chillida: Writings*, 20.
3. Boeckl, *Günther Domenig*, 12.
4. Kipnis, 'Against Two Gravities', 14–9.
5. Exhibited at the Exposition Internationale des Arts Decoratifs et Industriels Modernes, Paris 1925.
6. Kiesler emphasises that he put buildings on pilotis before Corbusier. See Bogner, 'Von der Raumstadt zum Endless House', 233.
7. Kipnis, 'Against Two Gravities', 17.
8. Kipnis, 'Against Two Gravities', 17.
9. Chillida, *Eduardo Chillida: Writings*, 66.
10. See fig. 9.8 and 10.5.
11. A detailed discussion about this follows in the next chapter, Agents | ground.
12. Brünner, *Constructing Atmospheres*, backcover.
13. Bollnow, *Human Space*, 133.
14. Bollnow, *Human Space*, 144.
15. Pelsmaker and Kroll, 'Recent Approaches to the Sustainable Retrofit of Victorian Houses', 177.

11.1

11.1 *Uralla Court II*, residence, South Australia 2006, © Daniel Kerbler

Agents | ground

The significance of the location for the production of architectural characters and space is discussed, and provides insights into the purpose of 'activating the ground' and its procedures in relation to natural and artificial grounds.

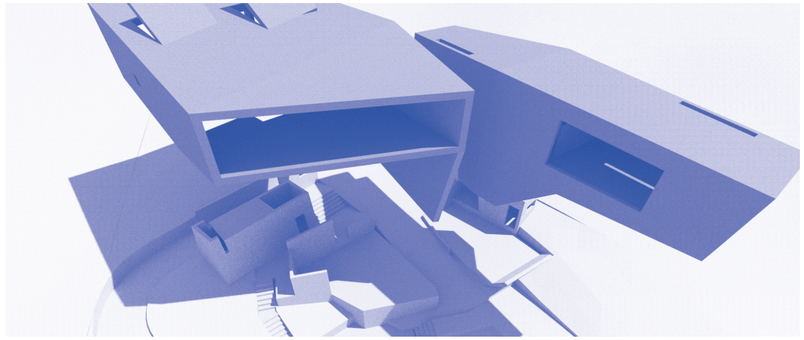
The ground is the authority of the place that I interrogate when engaging in a project. I have only become aware of the fact that I systematically 'listen to the site' and establish a relationship between object and ground through working on the design for the *River Torrens footbridge* (2012). In retrospect, *Uralla Court* was the first project in which I consciously consulted the site. I was interested in mapping its reaction to the architecture, which in this case was shipped from the other side of the world. I questioned how I could prompt a site to react and then map its intent. I concluded that the only thing to do was to observe the site, which, due to its limited responsiveness, meant bringing in an amplifier: the architect as seismograph. In this role, the architect is tracing the site's subtle moves by observing the way in which he/she responds to it. It is a question of empathy and trying to embark on the site's perspective – a lengthy process that I undertook while surveying the land, drawing the contours, translating them into a model and then simulating the arrival of the object and studying the topography's reaction. I asked myself: 'What would I do in place of the site?' I anticipated that the site was not simply going to accept the object, but that there might be a rejection, similar to an implant in the human body, and then a process of negotiation, acceptance or rejection. This is what I refer to as 'activating the ground'. Admittedly, there is a level of projection involved. Activating the ground has become a strategy that enables me to integrate the location into the production of an architectural project. At *Uralla Court*, activating the ground has led to an artificial continuation of the existing topography, which bulges towards the object, lifting it up and keeping it in an elevated position. The ground continues inside the building, while a strict separation between object and ground, established by their individual morphology and the choice of different materials, remains. Some of the ground's folds and protrusions can be read as objects in their own right, despite in fact being exaggerations of aspects inherent in the existing landscape.

Site specificity—Site-related architecture is often associated with projects that are driven by a mechanistic understanding of sustainability, where a design is

the outcome of a set of given site-related parameters, such as solar angles, wind direction and so forth. Or site relatedness is associated with the visual emulation of an existing context. My work is always site related, but this does not mean it is subordinate to existing conditions or that it excludes the author from the equation. A project has to have an idea or a cultural agenda that transcends local parameters. In my case, reading the site acts as a catalyst to produce the idea and make the cultural surplus of the project come forward. I have been asked how throwing an alien object onto a site could possibly be a means of acknowledging the site's character, proposing that, to the contrary, the move rather signifies my disrespect. I reply with an analogy: serving a melon with some prosciutto will bring out the sweetness of the melon and enhance the flavours of both ingredients. It works with contrasts. By creating a difference, existing qualities become recognisable, which in their staged unity create a renewed overall experience.

Local character—In *Dialogues in Time*, Peter Blundell-Jones describes the political and cultural environment that led to the establishment of the *Model Steiermark*, one of the most successful examples of political patronage for architecture. It conveyed the importance of architecture to the general public through exhibitions, workshops and publications and established Graz as a hotbed for contemporary architecture by commissioning public buildings for upcoming young architects. The *Kunsthaus Graz* by Peter Cook and Colin Fournier, and in its wake our *Thalia* project, would not have been possible without the history of persistent architectural education generated by the *Model Steiermark*. The Graz City Council understands that emulating the historic fabric of a city is not a guarantee for sensible new development. The *Kunsthaus* vividly demonstrates that even the most unfamiliar interventions are permissible if the project is based on a coherent conceptual approach and presents a surplus to the city, meaning that it discusses and solves contemporary issues rather than representing a long-gone discourse. Similarly, 'touching the ground lightly' is not a guarantee for respecting the land either. It is merely a slogan, a simplification that one can revert to in the absence of a deeper understanding of existing relationships on a site. Unless we are talking about true nomadic housing, habitations that come and go within a day, I believe that buildings erected under this banner have the same impact as any other dwelling that firmly sits in the ground. Any building work is disruptive. So, why try to sweet-talk it? I prefer to emancipate the ground and put it on concrete steroids, giving it a voice and allowing it to express itself.

Genius loci?—My approach of confronting a site with an alien appears harsh at first. Instead of appeasing and blending in, the move is meant to trigger a discourse between architecture and site, from which a performative relationship gradually arises. This is achieved by weaving the site's response into the project's genesis while extracting and amplifying local conditions. My projects acknowledge the conflict between existing fabrics and



11.2

11.2 ***Uralla Court*** | hovering volumes and ground reaction, South Australia 2004

new developments by giving agency to all protagonists, who argue it out between themselves and emerge strengthened from the discourse. In an interview with Alvin Boyarsky,[1] Wolf D. Prix states: 'We have, as a general principle, empathy for the surroundings, the genius loci. However, it is not important to respond understandingly to what is already there, but rather, to create something strong, with an emotional quality'.[2] Two years later, Prix dismisses the genius loci altogether:

'Always when we design for "foreign cities", we stumble upon the question of context . . . But since we long ago lost sight of the genius loci – or better said, we never had it in our baggage – we answer with a question. Context in what sense? Of material? Of colour? Of construction? Actually, we aren't interested in any of this.'

Prix concludes: 'we love to discover the (invisible) real and potential force lines of a city',[3] which is just another way of describing genius loci without using the term. Once one has discovered those intangible force lines and has established an understanding for the place, I believe one cannot but 'respond understandingly'.

Perception—For me, empathy with a location has two sides. On one side, it is a practice used to reach self-forgetfulness and immerse myself in the project. It facilitates a state of flow that allows me to be in the moment and keep a focus on the task at hand. On the other side, it recognises the character of a place, which for me is a prerequisite for negotiating and bringing about a project. Our perception is a response to stimuli from the 'outside' world that is actively reconstructed within our bodies. Therefore, I do not distinguish between myself and the world 'outside'; they coalesce. As a consequence, the question of whether my readings of the ground are true or projected – 'real' or 'subjective' – is irrelevant. My aim is to interweave site reading and interpretation while also giving room to

the author. A project needs to make sense, but it only needs to make sense at the end of the process. Eliminating subjectivity, ambiguity or irrationality along the way forecloses whole areas from where discoveries and innovations may kick off. Creative discoveries rely on connecting different areas whose relevance may not be obvious initially. Pallasmaa explains:

'Architectural problems are, indeed, far too complex and deeply existential to be dealt with in a solely conceptualised and rational manner. Profound ideas or responses in architecture are not individual invention ex nihilio either; they are embedded in the lived reality of the task itself and the age-old traditions of the craft. The role of this fundamental, unconscious, situational and tacit understanding of the body in the making of architecture is grossly undervalued in today's culture of quasi-rationality . . . Even masterful architects do not invent architectural realities; they rather reveal what exists and what are the natural potentials of the given condition, or what the given situation calls for.'[4]

Hybrids—A strong site can negotiate an equally powerful architecture. To achieve the right balance, I try to empathise with both the genius loci and the interdependent architectural character. The beauty of the dual approach – creature plus ground – is that I can immerse myself into different roles and thus incorporate different positions within a single project. The resulting projects are a hybrid between object-orientated architecture and landscape. The object, initially appearing dominant, is countered by an activated ground. The site is not considered a plain canvas but a character in its own right – one that literally lifts the object and actively contributes to shaping their relationship. In order to participate in a partnership, the ground needs to develop its own presence, which is achieved through the architect, acting as both seismograph and interpreter. The initial provocative moves by the architectural character aim at enervating the ground to become active and physically express its own agenda. At *Uralla Court*, the initial reaction of the ground shows a deflection that keeps the object at a distance. The sod transforms and bulges upwards; it hardens and becomes a concrete structure that defines the lower floor by enclosing and marking out different spaces. This process is reminiscent of the ritualised scars that emblazon the skin of certain native tribes in Africa, expressing its sculptural potential, its plasticity, which is realised by sliding shells under the skin. At Uralla Court parts of the programme have been slid under the sod, creating humps along existing 'force lines' that allow the topographical continuity of the surface, the existing landscape, to be maintained. They present an activated ground that is both part of the new and the existing condition of the site. The project then blurs the boundary between landscape and architecture.

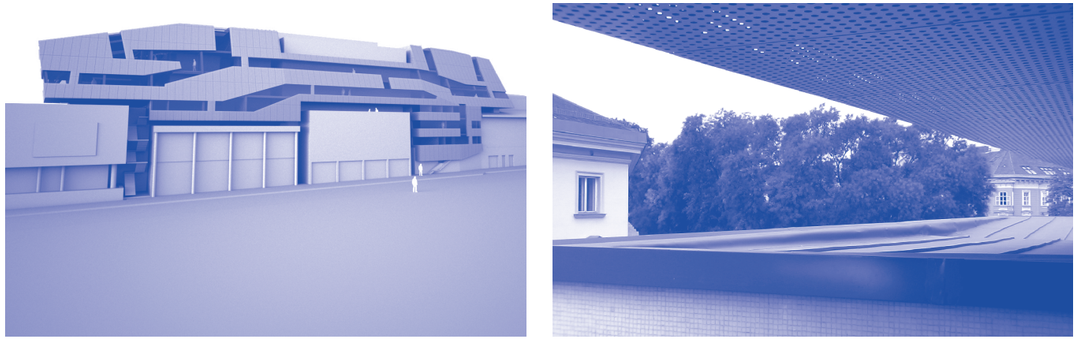
Artificial grounds—The preceding examples of activated ground have all been projects situated in natural terrains,

11.3

11.3 ***Uralla Court*** | ground reaction, South Australia 2004,
© Daniel Kerbler

raising the question as to whether the same motif can also be built upon when dealing with artificial topographies. What does activating the ground mean under those circumstances? It is the designer's decision then to see a roof's potential solely in offering shelter, or as a topography that becomes the foundation for a new development. The perspective changes, and above becomes below. This is the background of projects such as *Thalia Graz* or the *EAF extension*, where the object is situated on top of existing buildings. The legalities surrounding existing buildings largely do not allow physical alterations. Therefore, the response to an incoming object is muted. While the processes of developing empathy and orchestrating the dialogue between object and ground are still happening, the development expresses itself mainly in the architectural character rather than the ground. Listening to the site affects the way in which the architectural object develops from field to character, giving the site agency, even if it cannot express itself directly. Thus, it is silently activated. Looking at the generative processes at *Uralla Court*, one can see that the object does not just land but morphs over time in reaction to the ground. The same happens with the *EAF extension* and *Thalia Graz*, where the changes are a reaction to the continuously improved understanding of the site's character. The relationship between object and ground is near identical in projects that stem from a natural ground and those that develop on an artificial substrate. All three elements – object, ground and void – are present. Yet, their intensity and formal expression shift as a result of the particular circumstances.

Bernard Tschumi's *Fresnoy Art Center* (1991–7) exemplifies the potential of an artificial roofscape as an occupiable territory. The project takes advantage of the possibility of redesigning the entire setting, including the existing buildings and the airspace above them. At *Thalia Graz*, this was only partially possible, as the buildings below had to remain operational in their



11.4

11.4 Sam/Ott-Reinisch and Bette, *Thalia Graz* | Graz, Austria 2014

current state. *Thalia Graz* binds together four disparate buildings by occupying all existing gaps and developing a strong presence that bleeds into the existing context, thereby creating an overall identity. The void is not inhabitable in this instance and thus has become a signifier of space rather than an actual experience. It would have been favourable if the brief had catered for sheltered outdoor spaces, allowing the void to claim more volume and offer different spatial situations, which is what makes the *Fresnoy Art Center* so special. Tschumi creates another ground plane by adding a large roof that hovers above the existing buildings. Its formal expression references the site by replicating the existing roof topography. This is similar to the next ENTERprise Architects' hovering *Lakeside Pool* in Caldaro, Italy, where they took a cast from the seabed and placed it above the natural terrain. In both cases, the morphological information is already present and mirrored.

Preparing the ground—The question has been raised as to whether object and ground are truly acknowledged equally, as it may appear as if the ground is being prepared in order to receive the object, similar to when a painter primes a canvas to prepare for the painting itself. This interpretation is challenged by the chronology of events. Although the ground and its inherent qualities are already there when the object arrives, it is only afterwards that the ground begins to express itself. The object arrives at an unsuspecting site where it hovers in anticipation of a reaction. The arrival functions as a wake-up call for the site to express itself and subsequently form a symbiotic relationship that allows the object to land. At this stage, the designer's interest comes into play. Listening to the site is an expedient that gives the object something with which to interact. In an urban context, the information to work with exists in a readily comprehensible format as built form. In a natural context, the information is present

11.5

11.6

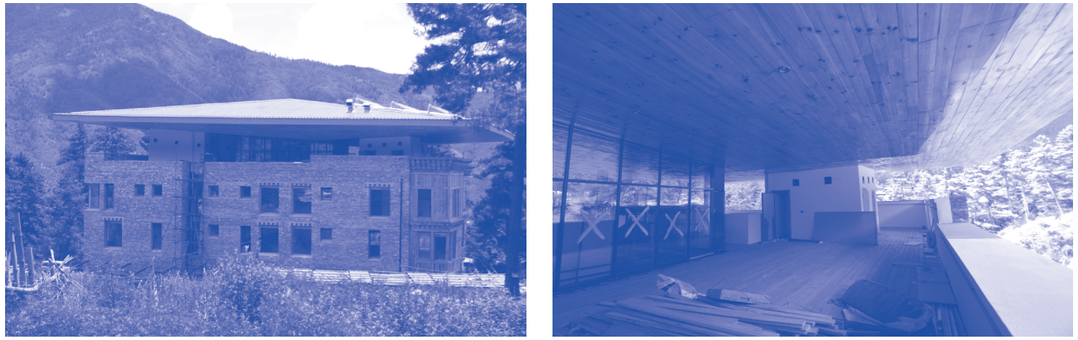
11.5 B. Tschumi, ***Studio for Contemporary Arts*** | Le Fresnoy, France 1997, © Peter Mauss/Esto

11.6 **Coop Himmelb(l)au, *Musée des Confluences*,** competition 1st prize, Lyon, France 2001/2010–2014

in a far more subtle way. It first needs to be sensed, interpreted and materialised before the object can engage in a dialogue with it.

Himmelb(l)au see the ground plane as a terrain that needs to be liberated from the 'feudal power mechanisms of land and land ownership'[5] and given back to the public, as exemplified at the *Ufa Cinema Dresden* (1993–8) or the *BMW Welt* (2001–7) in Munich. In contrast, I intend to emancipate the ground as an entity in its own right – one that takes control over itself and defines the ways in which the object interacts with it. While Himmelb(l)au lift their buildings above a plain canvas (the leaping whale above the waterline), my sites claim their 'ground' by articulating its appearance. In these Himmelb(l)au projects where the ground is physically differentiated, such as in the *BMW Welt* or the *Musée des Confluences* (2001/2010–14), the hovering bodies are being held up by figures that are part of an existing Himmelb(l)au repertoire – one that has been brought to the site rather than being an expression of the site itself. The concept sketch for the *Musée des Confluences* confirms this.[6] It shows an even ground on which independent vertical figures are placed in order to carry a horizontally floating body. The whale leaps out of a calm sea, and to keep it in the air, a couple of acquaintances join in for support. This is different from my own work, where the ground itself reacts, reformatting its own body to support or reject the architectural character.

The theme of hovering volume and activated ground is also present in the *HTMTI*



11.7

11.7 Ott-Reinisch, *HTMTI Hotel*, Bhutan 2015, © Irene Ott-Reinisch

Hotel, a project I worked on for the Viennese architect, Irene Ott-Reinisch. Here, the roof is pushed up by an array of stone masonry volumes that signify the ground to me in this project. Interestingly, the subsequent gap between lifted roof and ground finds its reference in vernacular Bhutanese farmhouses. While in farmhouses the gap is used to dry and store supplies, here it is programmed as a spa area for the guests. An originally proposed inverted gable roof was rejected because of the strict Bhutanese building code that demands new development to emulate the appearance of traditional buildings. A more prominent double-pitched roof, projecting upwards and downwards, was surprisingly accepted.

Viewing the ground as an animate entity is entirely reasonable in different cultures. Akira Suzuki, the client of Peter Wilson's *Suzuki house*, described to me the ground purifying ceremony 'Ji Chin Sai' that initiated the construction of his house in Tokyo. During the ceremony, all participants – client, architect, builder, carpenter and priest – try to talk with the 'god of the ground', aka the genius loci of the site, wishing for the safety and success of the construction. While this ceremony is embedded in a cultural context and follows a defined protocol, for me, the connection to ground is simply a creative tool – a personal play that I initiate to start and prolong the design process.

How to acknowledge and integrate local context into a design is a core question of my practice. I do not consider the location as a background or environment, but rather as an active counterpart. I start a project with the seemingly brutal move of confronting the site with an unrelated alien object. It is meant to provoke a reaction from the site that, through my reading and interpretation, reveals and acknowledges the character of the location. Expressing the ground's intent is facilitated by immersing myself into it and becoming a seismograph for its plans. In doing so, I recognise the location as an entity in its own right. Mediating the subsequent dialogue between object and ground marks the activation of the ground. The ground takes control over itself, expressing its interests either through topographical moves or by influencing the evolution of the architectural object/character. Activating the ground also serves my own interest. The dialogue between the two antagonists strengthens their presence and translates directly into the energy they emanate into the void between them, thus turning mere void into space. I am now at a point where I understand the ingredients of my design process. At the beginning of my research, I knew about the characters (little creatures), who were the actors in each project. Yet, I was not sure what their function was. Now, I understand that they are agents provocateurs, whose role it is to incite a reaction from the ground. This move activates the ground and is the prerequisite to developing spatial sequences that are both authentic to the location and the author.

Notes

1. Chairman of the Architectural Association in London from 1971 to 1990.
2. Prix, 'We Were Young and Very Bored', 240.
3. Coop Himmelb(l)au, 'Our Architecture Has Four Cities and Seven Lives', 60.
4. Pallasmaa, *The Thinking Hand*, 15.
5. Kipnis, 'Against Two Gravities', 14–9.
6. See fig. 11.6.

12.1

Case study | speculative

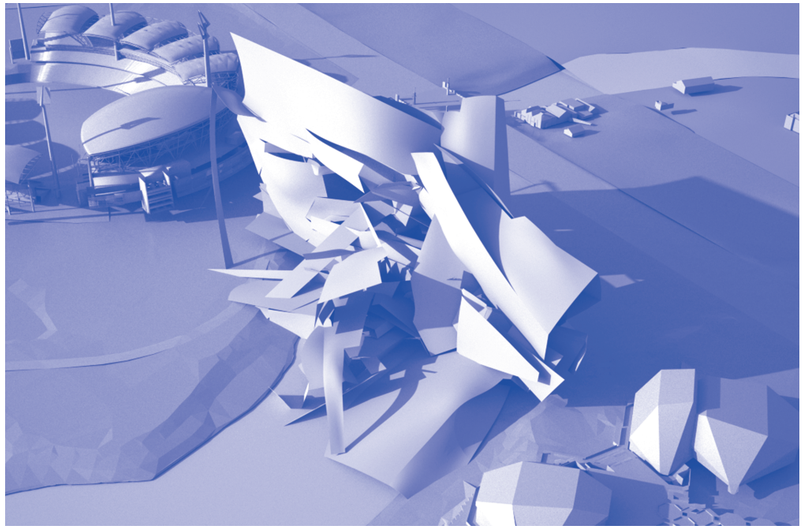
12.2

Within this and subsequent chapters, the intention is to test and validate the previously described revelations through projects from different work scenarios: a speculative competition, a built project, a series of experimental installations and design studio teaching. The *River Torrens footbridge* (2012) serves as an example to investigate a project's genesis set in the atypical context of a landscape scenario, revealing the presence of similar strategic moves in a 'horizontal' setting as in 'vertical' architectural work.

Background—The design developed from an Expression of Interest which I had put in together with landscape architects James Mather Delaney and engineering company Bollinger + Grohmann.[1] Doing a landscape project was timely, since I had discovered the 'ground' as a driving topic in my work. The project enabled me to gain new insights into the relationship between object and ground, and thus created an epiphany for me that informed parts of the previous chapters. Doing a landscape project felt like an entirely new problem to me, without any reference to earlier works.

12.1 *River Torrens footbridge* | Adelaide, Australia 2012, © Daniel Kerbler

12.2 **Process diagram** | showing stages of the object–ground relationship



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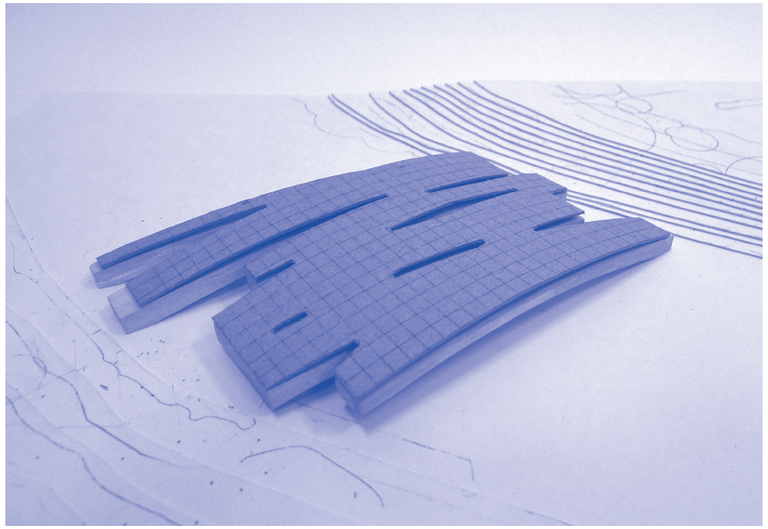

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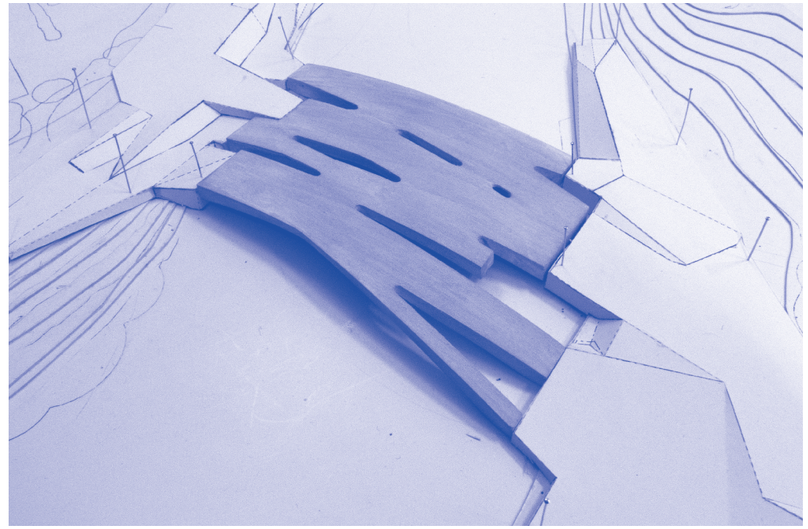


12.5

12.3 ***River Torrens footbridge*, digital model** | spatial field serving as a point of departure, Adelaide, Australia 2012

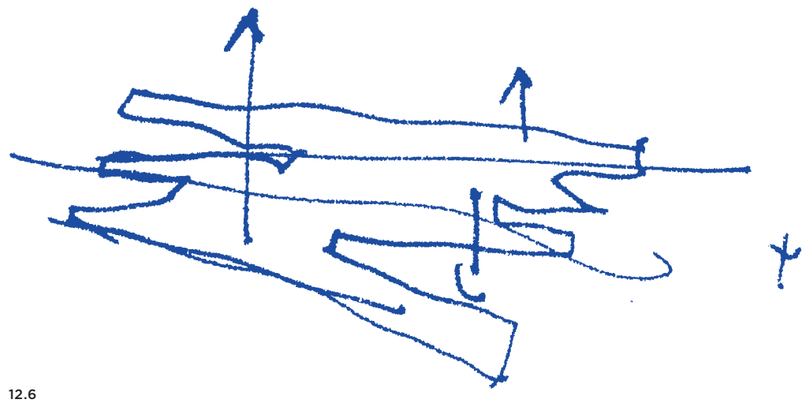
12.4 ***River Torrens footbridge*, card model** | extracted object falling short Adelaide, Australia 2012

The project developed along a horizontal rather than vertical axis. Thus, it did not allow me to revert to existing formal stereotypes. This meant that the evaluation of the design, in regard to process and the sequence of events, could not be made on the level of visual appreciation and resemblance. As a consequence, the project gave me the opportunity to focus on the performative relationship between my design protagonists rather than their expressive qualities. Doing a landscape project became a chance to distinguish between the formal expressions in my projects (heavy mass, compact figures, single surfaces, obtuse angles) and the relational strategies that are embedded in them (detaching the object from the ground, lifting it, engaging in a dialogue). It confirmed operational strategies that are present in my work and unveiled the motivation that lies behind them.

Epiphany—As with other projects, I started with materialising a field of spatial information from recycled fragments of earlier works, which were heaped onto the site with the intention of rereading and

12.5 ***River Torrens footbridge*, timber and card model** | object and ground bridging the gap, Adelaide, Australia 2012

12.6 ***River Torrens footbridge*, concept sketch,** Adelaide, Australia 2012

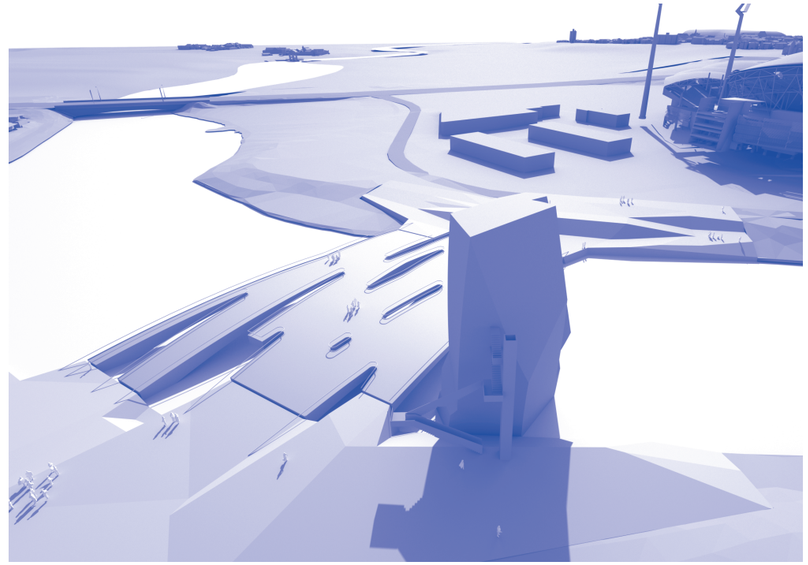


12.6

reinterpreting them in the context of a new site and programme. This assembly had no order or relation to the site, and thus depicted the first instance of unreasonableness in this project. In search of new characters, the pieces were enclosed by a virtual volume (imagine a swarm of fish in a frozen aquarium). The floating pieces created a field that I interpreted as a heterogeneous grid which guided me when cutting and carving away at the virtual block. In a second step, I peeled away excess material to reveal and extract single objects from the block. They were then tested against their potential to function as a bridge. Many attempts were not satisfactory, as they all created an underpass situation at the river's edge that separated the different users and directional flows. In another attempt, I joined individual objects, trimmed and distorted them so that they were able to span from one side of the riverbank to the other. Although eliminating the underpass situation, it was still not satisfactory. I could not tell why; it just did not feel right. I then kept experimenting with different sizes and shrinking the object until it fell short of actually connecting the riverbanks at all, finding itself in the midst of the river, contradicting the basic function of a bridge. In the next step, I looked at the site itself, the river edges, and the landscape began to differentiate and extend, bridging the gap between the riverbank and the object. It then dawned on me that this was a similar operation to earlier projects, where I lifted the object above the ground, waiting for the ground to extend upwards. Without being aware of it, I had initiated the same protocol as in earlier projects and 'activated the ground' – in this case, the riverbank. What normally happens along a vertical axis was now being implemented along a horizontal relationship.

As a result, the bridge became a hybrid that is constituted by object and landscape. It unified all the traffic – north–south from the festival plaza to the Oval and east–west along the river – on one continuous plane that gently rolled up and down, tying together all adjoining topographies. Instead of being a pure transit route, the bridge becomes a location in itself. The various open-air functions held on the surrounding lawns are able to extend onto the bridge, where they are supported by the built-in infrastructure. With a width of 60 metres, the bridge's topography can be programmed in different ways while still being wide enough for transit. Smooth transitions and inclinations below the threshold of 1 in 20 allow for wheelchair access along dedicated corridors. The frayed structure creates unique spatial situations and various forms of interaction with the water, either along the steps of the riversides or at the slits in the bridge itself. These voids create a spectacle of dappled light underneath the bridge, which is experienced by those who cruise the Torrens in paddle boats.

The design for the *River Torrens footbridge* shows how I apply the same strategic moves in a 'horizontal' landscape project as in 'vertical' architectural work. In both scenarios, I bring the incoming object into an unstable position, where it approaches the ground while still keeping a strategic distance. This gap has to be overcome in order



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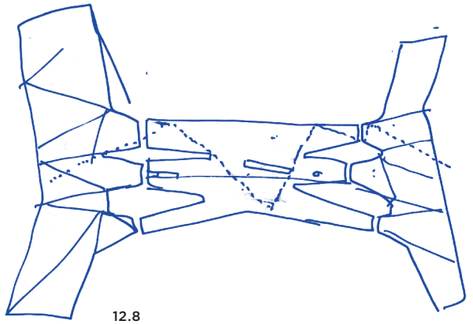

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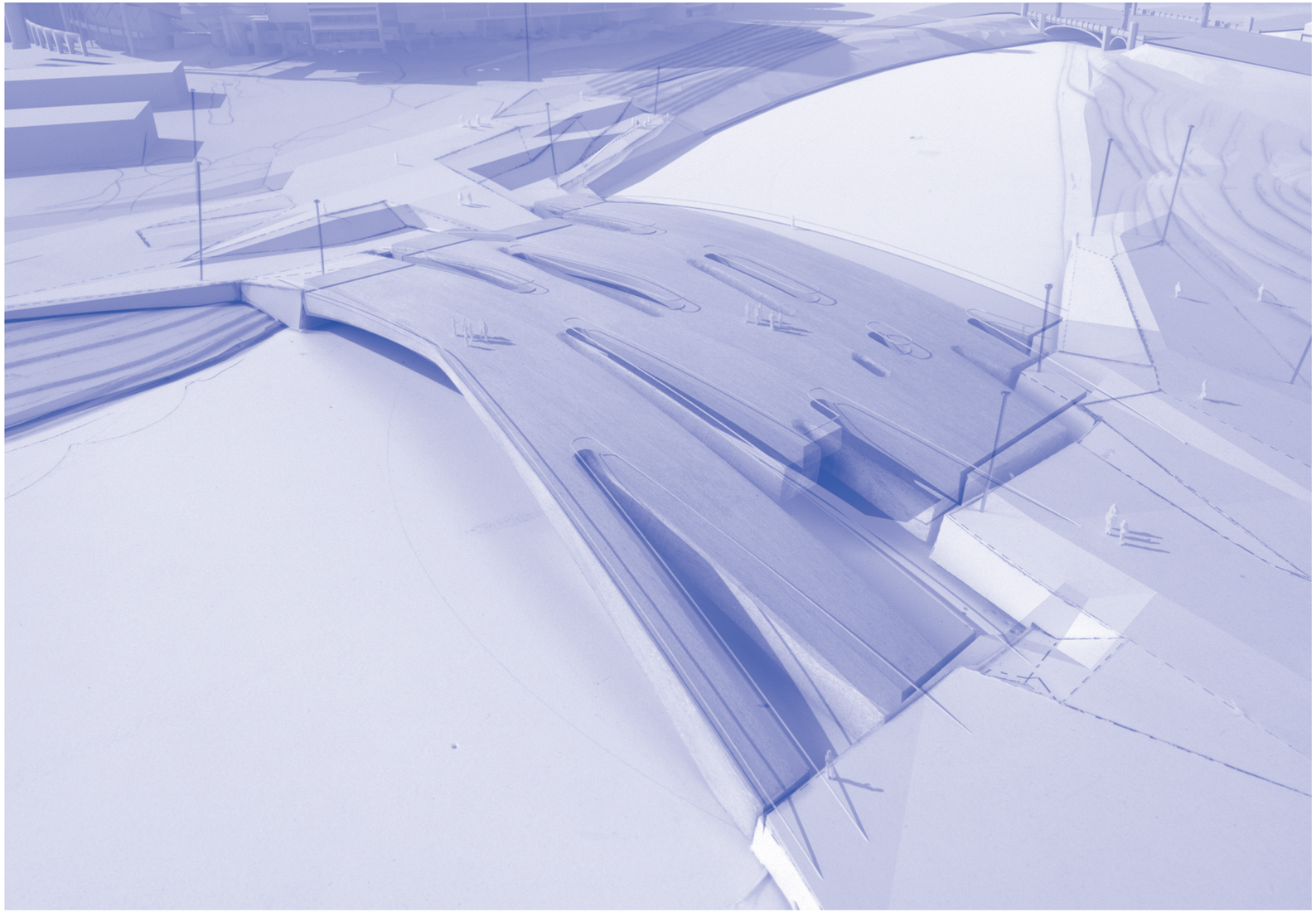
12.7 ***River Torrens footbridge*, digital model** | two creatures, Adelaide, Australia 2012

12.8 ***River Torrens footbridge*, concept sketches,** Adelaide, Australia 2012

for the project to become functional. Fulfilling the brief is always a joint effort between the two protagonists, while the void between them provides the room for negotiating a common strategy. As in previous projects, I manufactured a situation that demanded a reaction from both the ground and the object in order to be resolved. Until then, I thought that I was mainly interested in lifting the object, in the phenomenological aspects of hovering and creating a space underneath. Yet, in working on a 'horizontal' project, I had the revelation that I was not pursuing a visual appearance but a performative relationship between object and ground. Instead of it being a reference to my Austrian heritage (the leaping whale), the detachment of the object acts as an operational strategy that triggers a dialogue from which form, performance and space arises.

Note

1. Klaus Bollinger teaches structural engineering at the Angewandte. His structural solutions are tailored around the architect's design intent, offering possibilities rather than constraints. Amongst many others, he conceived the structural solutions for Himmelb(l)au's UFA Cinema in Dresden, Zaha Hadid's funicular in Innsbruck and Sana's Rolex Learning Centre in Lausanne.



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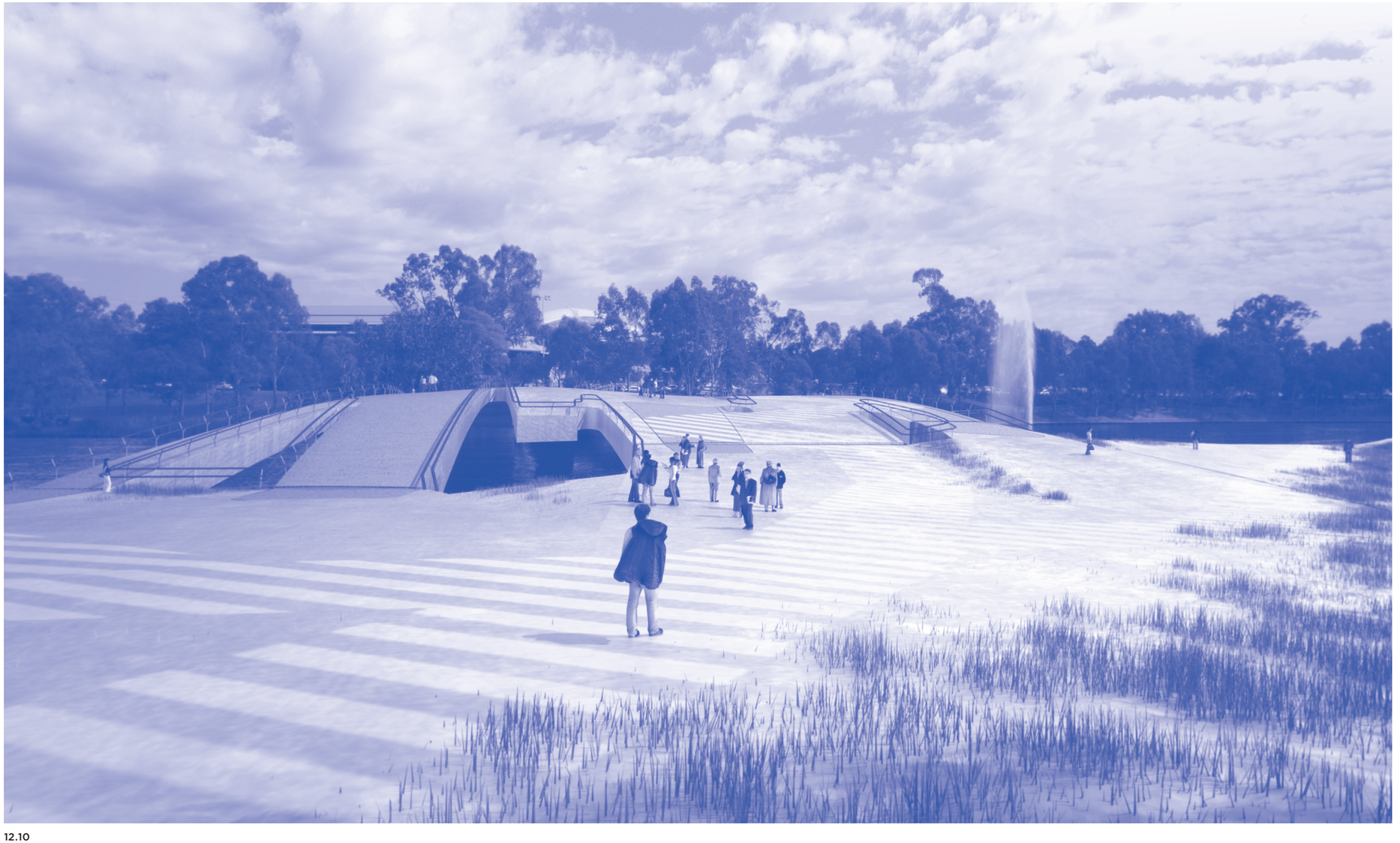
12.9 ***River Torrens footbridge*, timber and card model |** performative relationship between object and ground, Adelaide, Australia 2012



12.10

12.10 ***River Torrens footbridge***,
Adelaide, Australia 2012,
© Daniel Kerbler

13.1

13.1 Sam/Ott-Reinisch and Bette, *Thalia Graz* | urban infill on top of four existing buildings, Graz, Austria 2014, © Hertha Hurnaus

Case study | built

***Thalia Graz* examines the conditions that surrounded the successful implementation of a won competition, giving evidence to the process of panning for gold in a spatial field of artefacts and exemplifying the activation of an artificial ground in the form of existing buildings.**

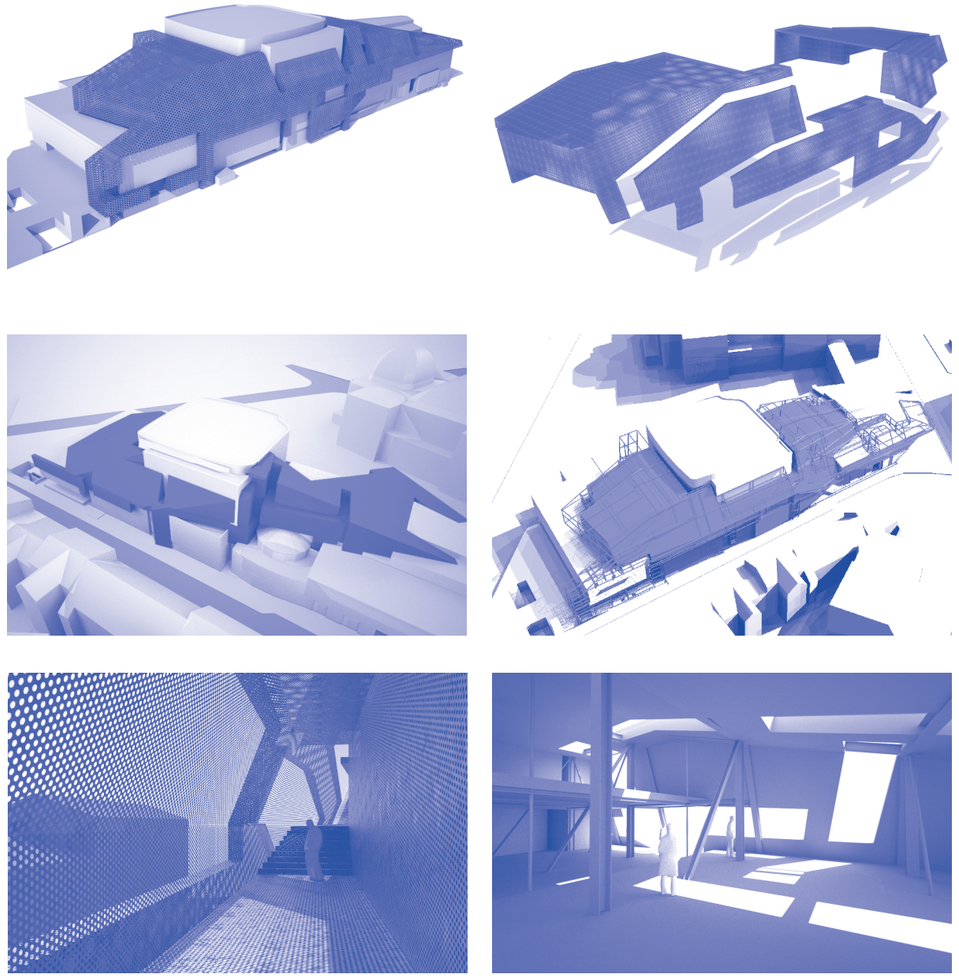
Background—*Thalia Graz* is the result of an architectural design competition that asked for 4,000 m^2 of fitness studios and offices to be situated on top of a heritage-listed building opposite the State Opera House in Graz, Austria. The aim was to restructure the entire complex, which, after partial completion of a previous project, had been left in an incoherent state. Instead of keeping within the given boundaries, we based the design on the premise that all existing roofs and the facades of the adjoining buildings were to be regarded as the site. As a result, we distributed the building mass along and above four existing buildings, and nestled it into all available niches. This allowed the perceived volume to be kept low and relevant lines of sight to be maintained. The existing agglomeration is now ingrained and bracketed by a new volume, and fused into one coherent spatial development. Despite functioning as an infill, the building presents itself as an independent body, with a character distinct from its surroundings. The articulated spatial distance to the existing buildings emphasises the corporeality and creaturely aspect of the new volume, which is further reiterated by an all-encompassing skin that does not differentiate between facade, roof and soffit. The form and its relationship to the context were continuously reworked through digital and physical models until all the technical and functional aspects could be integrated in such a way that they became invisible, supporting the reading of one homogenous body. Through the inclination of the façade, the urban space of the adjoining street maintains its openness towards the sky. The structural solution is based on storey-high steel trusses that transfer their loads downwards through new shear walls within the existing buildings. The building envelope is conceived as a foil roof on a trapezoidal sheet-metal substrate that is covered by a vented skin of perforated aluminium sheets.

For this project, I collaborated with Irene Ott-Reinisch and Franz Sam, for whom I had previously worked as a design architect. Franz was the project architect for the *Falkestrasse rooftop extension* by Coop Himmelb(l)au. He has a great passion and understanding for solving detailing as well as engineering problems. Irene's

strength lies in project management. Both were the local architects for Steven Holl's *Loisum Hotel* (2005) in Austria. Together, we formed a well-balanced team whose individual strengths covered all the challenges a complicated project could throw at us. Through project booklets, I facilitated the information exchange and the discussions between Adelaide and Vienna. The time difference between Australia and Austria became an advantage for the swift progression of the work. When we ended our shift in Adelaide, Vienna took over, and then we would continue the next morning with the updated material.

Process—The genesis of the design followed the previously described steps. In default of an immediate idea, I produced a sea of spatial information, assuming that the creature (or whale) was already present yet invisibly submerged within. I then observed the ripples in the water, waiting for the moment to extract the figure. In this case, the field of information was provided by an inverted imprint – materialised voids – of the surrounding densely built-up area, and then overlaid with the site as digital models. On screen, the multiple fragments of existing spaces were viewed in wireframe, turning them from objects into a field condition. I would then turn individual parts to solid display and stitch them together into one large object. This process was guided by an immediate gut feeling. After defining a range of different superstructures, three to four figures were built as physical models and evaluated for their spatial and sculptural qualities. An early abstract render of the site fused the four existing buildings into one homogenous mass that reminded me of an ocean liner. This led to two different lines of research: one into vessels (boats, spaceships, planes and submarines[1]), and the other into methods of concealing volumes, including dazzle paintings, camouflage and trompe l'oeil. The aim was to blend the building into the background as a means to homogenising the disparate context.

Creating identity—The idea of camouflage was dropped, and instead we pursued the opposite approach to make the new structure stand out as much as possible, since a less distinct building would have merely contributed to the already existing visual noise. The new arrival acted like a magnetic pole that reorientated the bearings of all the matter in range. The addition became both a solitaire and a binder of aggregate by occupying all the gaps between the disparate buildings while also developing an individual presence that radiated into the context, giving the entire ensemble a new identity. The new character is the result of a careful negotiation between the extracted object and the existing built fabric. A dialogue that sometimes turned into conflict established the terms of cohabitation and the emergence of different expressions of space: internal space implicated by the object shape, space between the object and ground, and space radiated by the architectural character. Although the new building is clearly 'not from here', one can read that it has adapted itself to the local conditions as much as the existing ground – the four



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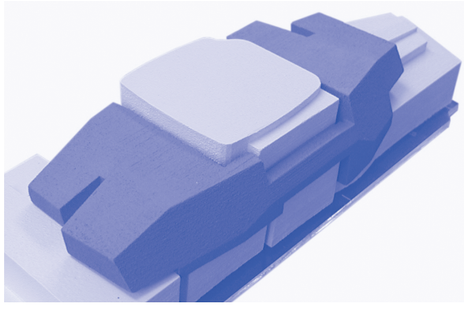
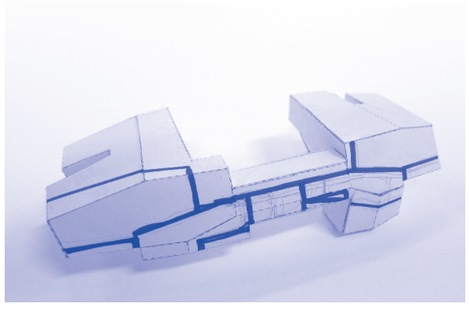
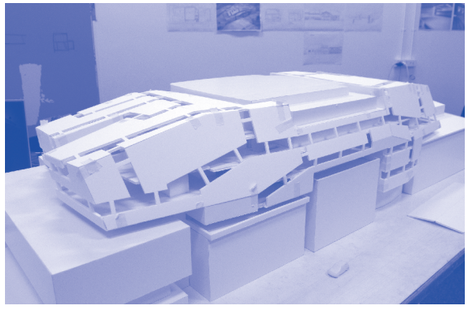
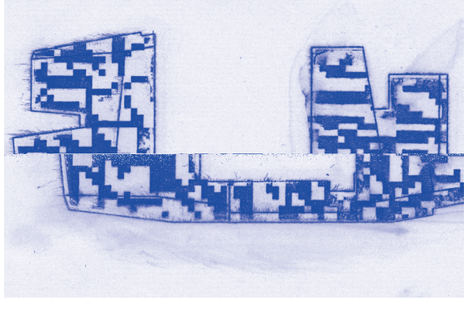
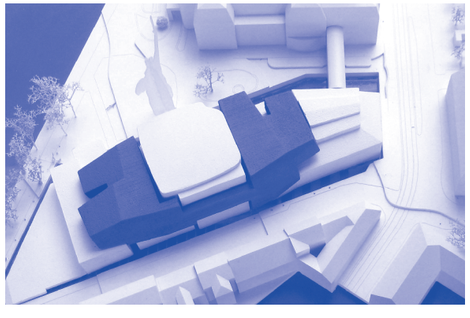
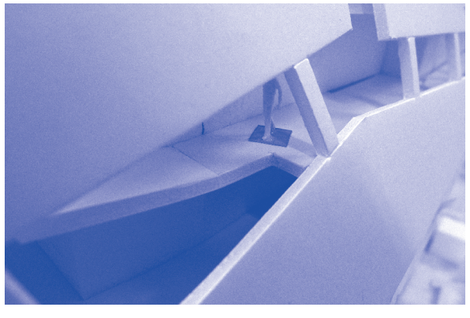
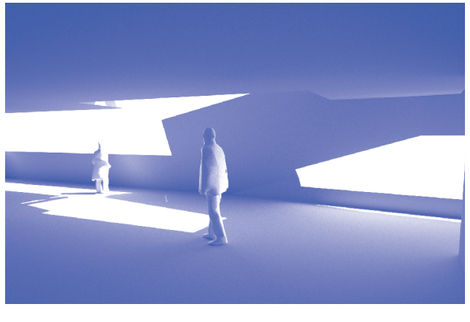
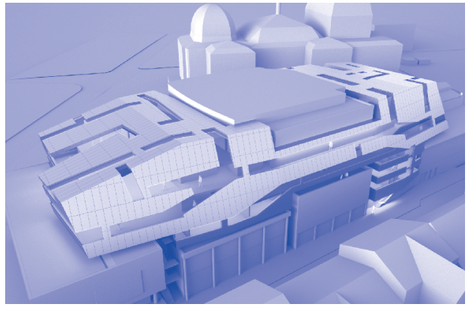
13.2 Sam/Ott-Reinisch and Bette, *Thalia Graz* | design evolution and development, Graz, Austria 2014



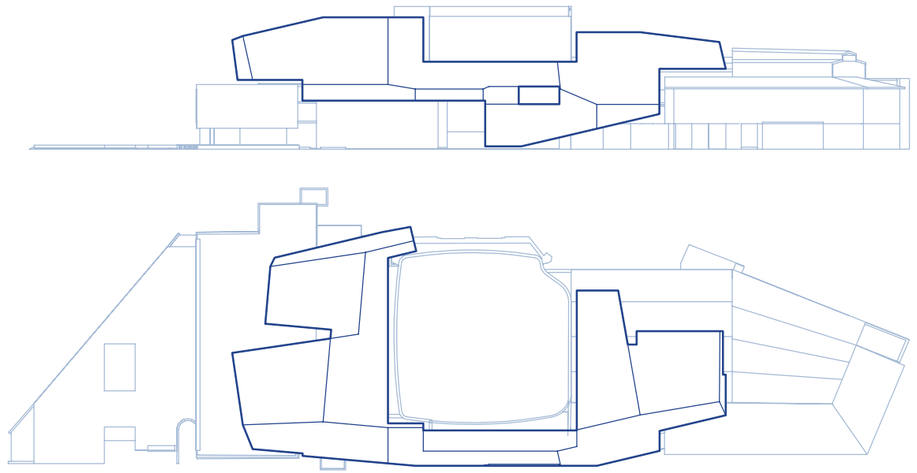
13.3

buildings – have adapted themselves in order to accommodate the new arrival. This follows a process of give and take, out of which the whole arises as a strengthened unit. This only works if the character is strong enough to initiate and steer the development, as the ground itself has a tendency to cultivate its inertia and remain inactive as long as it is not challenged.

Silent activation—Due to the fact that the ground is made up of existing buildings with a continuous programming (theatre, café, workshop, retail outlets and offices), its activation had to remain relatively 'silent' in order to minimise disturbance. This meant that the ground was predominantly acknowledged by being listened to, and physical movement had to remain subtle. The ground still reacted, just not to the extent we would have seen with a project on natural soil. Parts of the existing offices on the south-eastern side still caved in to create room for vertical access, while walls within were thickened to bear the load of the addition. Some walls on the north-eastern side extended towards the character, supporting its cantilevering volumes. Finding ways to incorporate constraints while still catering for personal agendas reflects the specificity of the architectural profession in contrast to sculpture and art. Moves were limited to what could be argued for within the realm of 'reasonable' structural or functional necessities. The motive of the lifted mass was carefully modulated. Height restrictions and the lack of programme for outdoor spaces meant that the

13.3 Sam/Ott-Reinisch and Bette, *Thalia Graz* | internal void, Graz, Austria 2014

13.4 Sam/Ott-Reinisch and Bette, *Thalia Graz* | competition stage elevations, south and top view, Graz, Austria 2014



13.4

lift could only be realised in a moderate way. The resulting void implies space rather than physically providing it. Yet, it is large enough to emphasise the character's independence from the context. Cutting up the building's skin into individual segments, reminiscent of the interlocking shells of crustaceans, resulted in gaps that were used as fenestration. This move could be interpreted as a first attempt at dissecting the whale.

***Thalia Graz* balances all aspects of the previously discussed processes. It follows the central chain of events (field – figure – character/site – ground – activation) and uses both methods of assessment (emotive cognition and intellectual synthesis) for form finding and conceptualisation. Its morphological features (compact yet animated) identify it as representative of an established formal language. Technical topologies such as structure, roof, façade and so forth are integrated into an all-encompassing skin, supporting the motif of one bodily character. The activation of the ground is both 'silent' and 'active'. It is expressed in the way that the ground retreats and advances in reaction to the new arrival, while at the same time affecting the object's transition from field to figure to character. Focusing on the object responds to my belief that the care and attention I put into the design will radiate back as an energy that fuels the emergence of space in the form of an emitted ambience or atmosphere. This energy fuels the most important occurrence of space in this**

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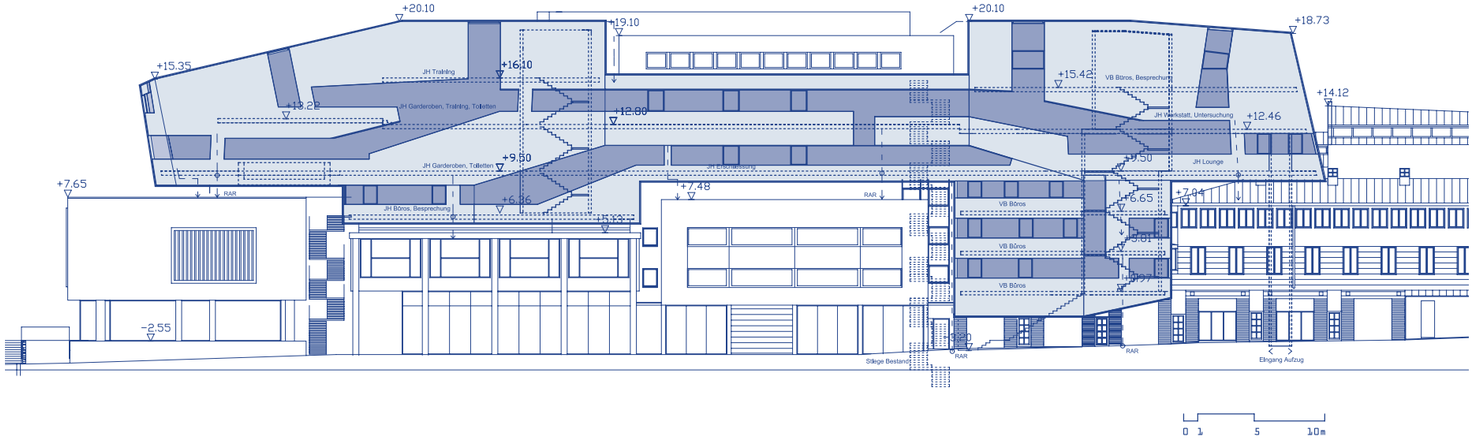

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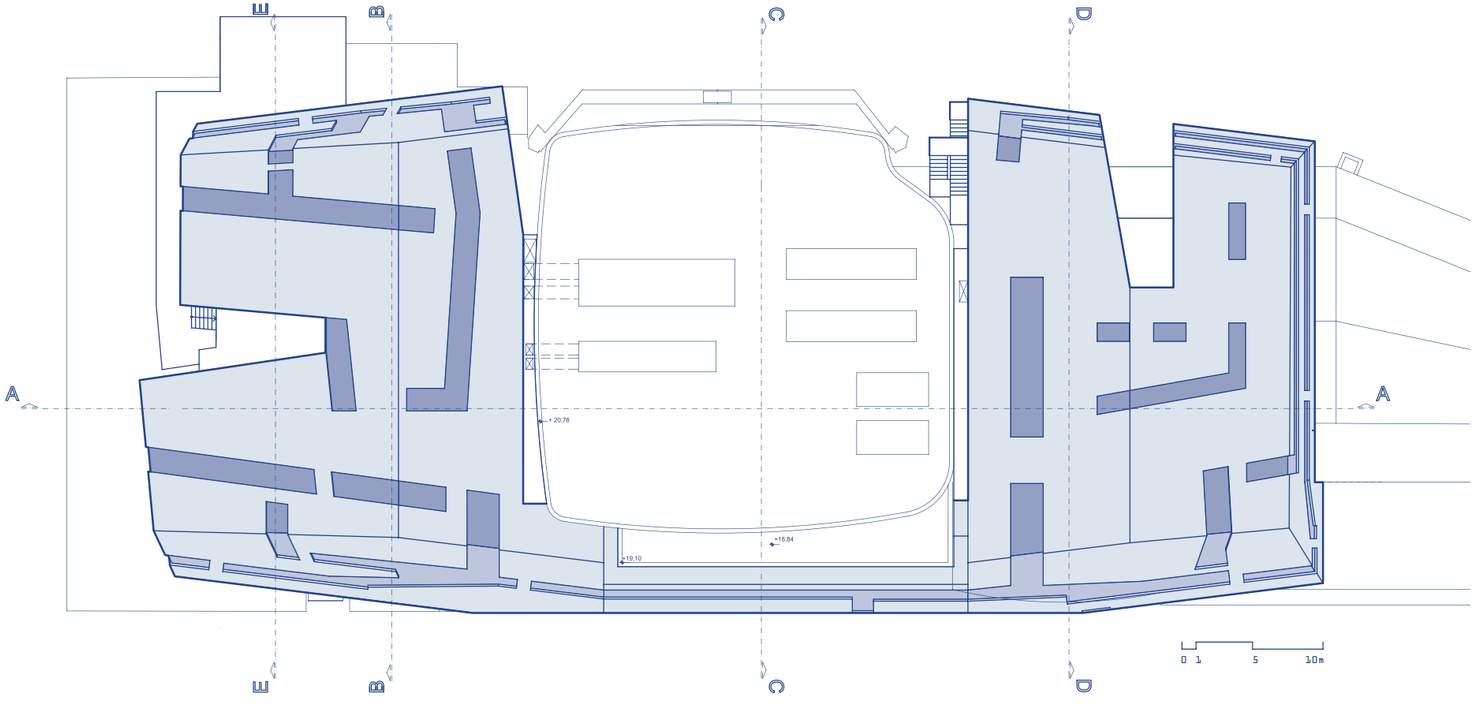


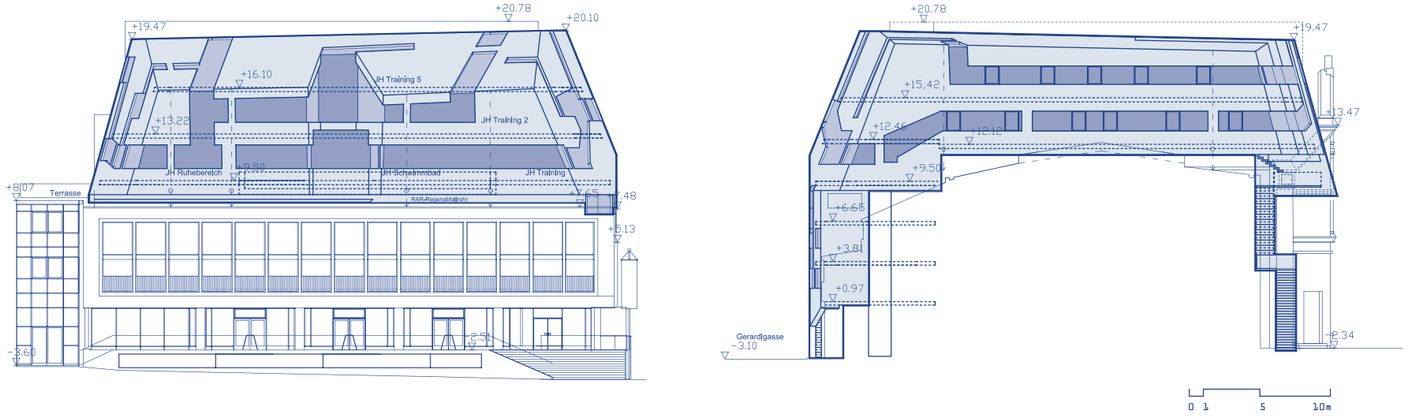
13.5 Sam/Ott-Reinisch and Bette, *Thalia Graz* | south elevation, Graz, Austria 2014

13.6 Sam/Ott-Reinisch and Bette, *Thalia Graz* | top view elevation, Graz, Austria 2014

project: the character's presence emanating into the context and giving it identity.

Note

1. The topic of vessels is present in other projects as well: *Uralla Court*, *Suzuki house* and the *EAF extension*.



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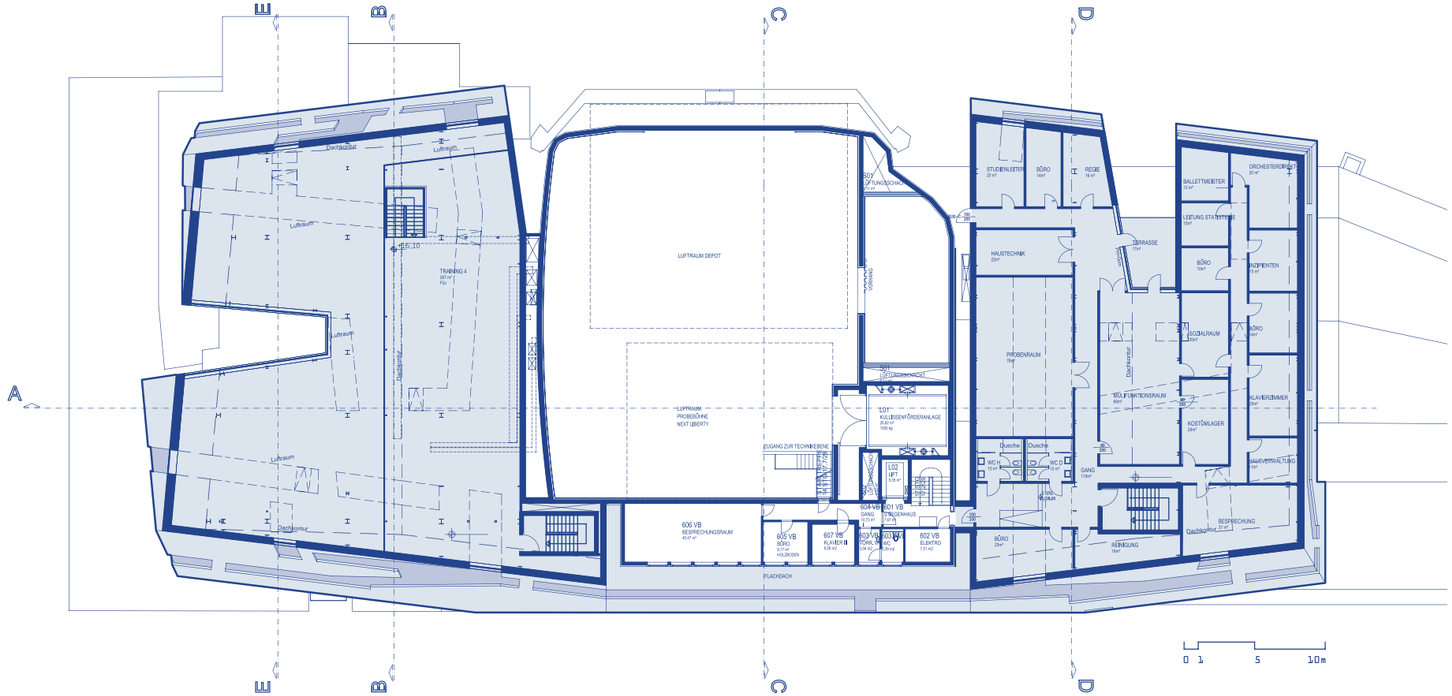
13.7 **Sam/Ott-Reinisch and Bette, *Thalia Graz* |** western and eastern elevations, Graz, Austria 2014



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13.8 **Sam/Ott-Reinisch and Bette, *Thalia Graz* |** level 6 plan, Graz, Austria 2014

13.9

13.9 Sam/Ott-Reinisch and Bette, *Thalia Graz* | exterior voids, Graz, Austria 2014, © Hertha Hurnaus

13.10

13.10 Sam/Ott-Reinisch and Bette, *Thalia Graz* | cantilevering across existing buildings, Graz, Austria 2014, © Hertha Hurnaus

13.11

13.12

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13.14

13.11 Sam/Ott-Reinisch and Bette, *Thalia Graz* | view towards the Opera House, Graz, Austria 2014, © Hertha Hurnaus

13.12 Sam/Ott-Reinisch and Bette, *Thalia Graz* | new development above heritage listed building, Graz, Austria 2014, © Hertha Hurnaus

13.13 Sam/Ott-Reinisch and Bette, *Thalia Graz* | opening up the space of the street towards the sky, Graz, Austria 2014, © Hertha Hurnaus

13.14 Sam/Ott-Reinisch and Bette, *Thalia Graz* | view along Girardigasse, Graz, Austria 2014 © Hertha Hurnaus

14.1

14.1 **Bette/Brünner, *Unreasonable topographies – dock 2*, paper model |** tangible materialisation of Brünner's performative site reading, Adelaide, Australia 2011

Case study | experimental

***Dissecting the whale* is the most recent step in an ongoing series of installations. Their aim is to explore the topics of my research in a medium that is free from programme or functional constraints, revealing aspirations and contradictions that are present in my work.**

Background—By focusing on the auratic quality of the architectural characters, some of the sequential spatial experiences that play out in the transition between inside and outside have been lost in recent works. The project *Dissecting the whale* (2014) addresses this by proposing another operational move – one that carves up the volume and re-facilitates the spatial flow between inside and outside, character and ground. The point of departure for the series was the previously described exhibition project *To the Islands*, in which I collaborated with the artist Margit Brünner. She started by engaging in a personal dialogue with a specific site, using a Stanley knife to 'draw' paper models that traced the atmospheric shifts in her conversation with the location. These three-dimensional mappings were passed on to me. I then transcribed these models from physical to digital in order to familiarise myself with the material and its spatial qualities. Through a series of renders, I produced hypothetical spatial scenarios, anticipating different scales and camera positions to explore their architectural potential. The material formed the point of departure for reading and interpreting the three-dimensional information in regard to traces of the whale, the architectural figure that I assumed to be hiding within. I believe that any aspect extracted from a site can contribute in a meaningful way, even when its potential cannot initially be validated. In contrast to a traditional site analysis that asks concrete questions and expects such answers, the concept of the 'unreasonable' starts with an unfocused view.

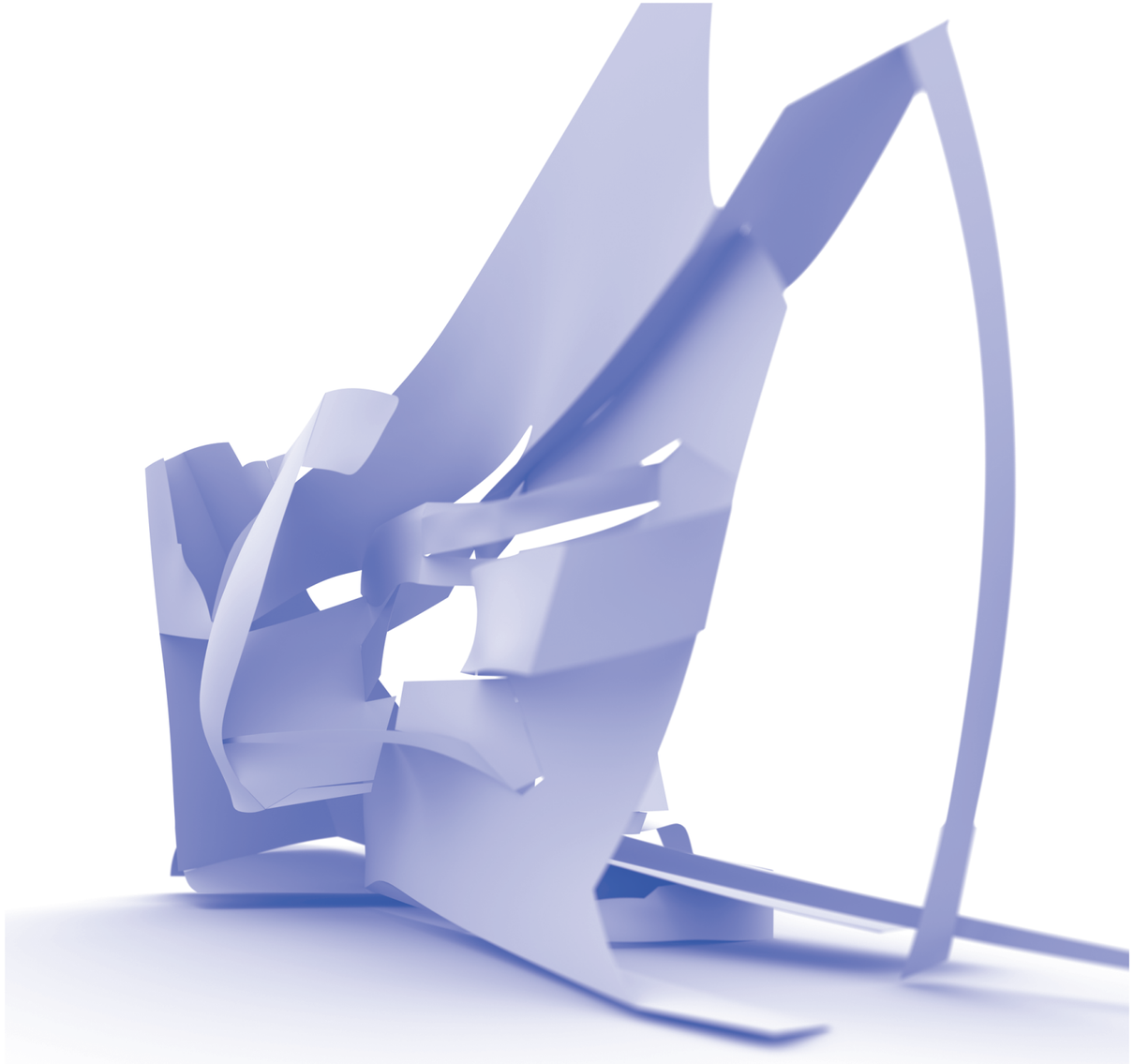
All material carries information specific to the place from which it comes. Its significance only emerges in the processes of interpretation, when the designer's own predispositions and the general intent of the project are projected onto them. Similar to previously described projects (*River Torrens footbridge* and *WIFI St Pölten*), I bound the material in a virtual solid, from which I cut and subtracted material along the lines of existing surfaces. This process aimed not just at finding a form, but also at defining and testing which levels of spatial complexity could be achieved when using single curved surfaces. The use of projecting curves as a cutting tool ensured that the surfaces that determine the figure

could unfold onto flat surfaces, therefore allowing for a rationalised production of segments and their assembly. Investigating questions through an installation project is critical, as the gained insights and production methodologies feed into forthcoming architectural work.

Silent activation—The dialogue between object and ground, which had begun on a site in Port Adelaide, was being continued at the SASA Gallery in the Adelaide CBD. Once a digital corpus was extracted from Brünner's physical models, the gallery environment became part of its upbringing, influencing the development of the whale's specific character. Due to the fact that the gallery could not be altered, the dialogue and subsequent activation of the ground could only be expressed through the object itself. Once completed, the corpus was broken down into its elements, skin and bones, then cut with a CNC machine from cardboard and assembled in the gallery space. To reinforce the whale's monolithic appearance, the initial stitches were covered by paper tape, giving the creature a seamless and all-encompassing skin. The physical gallery space became the whale's transitory home, where it seemed at ease with itself, floating in space as if it were at sea. After the exhibition, we decided to relocate the whale to where it was originally conceived. There, Brünner was supposed to take over again and initiate the whale's next transformation. We installed the work suspended from a ferry terminal ramp, but before she was able to rework the object, someone else had laid hands on the installation. As a result of slashing cuts and punches, its skin was cracked and partly peeling away. Although we initially considered this unplanned intervention as a part of the transitional process, we dismantled the installation in reaction to this.

Spinoza's Cabinet—A few months later, Margit Brünner, now in the role of curator, invited me to participate in *Spinoza's Cabinet*.

'The title refers to the Dutch Jewish philosopher Baruch Spinoza (1632–1677) whose universe implies the interconnectedness of all living systems, building on a temporal dynamism of reality. His masterpiece "Ethics" about the origin and nature of emotions offers a way to rethink relations in an increasingly challenging global context. The project is an attempt to install "paradise" into the local atmospheres of a shop front in the Adelaide CBD by means of art. Based upon Spinoza's concepts it puts into prominence art-practice as a site of knowledge. It investigates an autonomous art-piece that is not attached to a specific artist but rather emerges from a series of situations and interactions, exploring the notion of paradise. The artists are invited to explore their practices as a "skill" of communication and of achieving accordance not by intellectual discourse but through open-ended experimentation. Immediate practice or improvisation might be defined as presence in the making and as a precise concentration of a mind towards artistic processes – the attempt to witness "what is", and to understand how "what is", and how it is "constructed" in the moment. This practice seems to be best suited to unveil "paradise".'[1]



14.2

14.2 Bette/Brünner, *Unreasonable topographies – island 5*, digital model | interpreting the initial site readings, Adelaide, Australia 2011

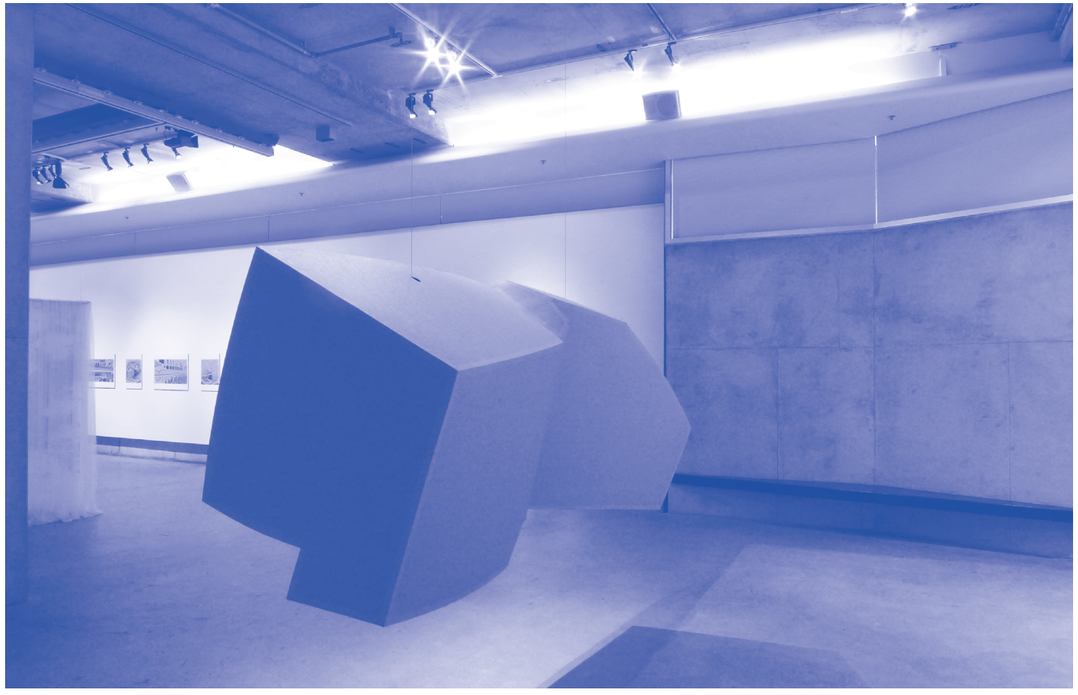
14.2

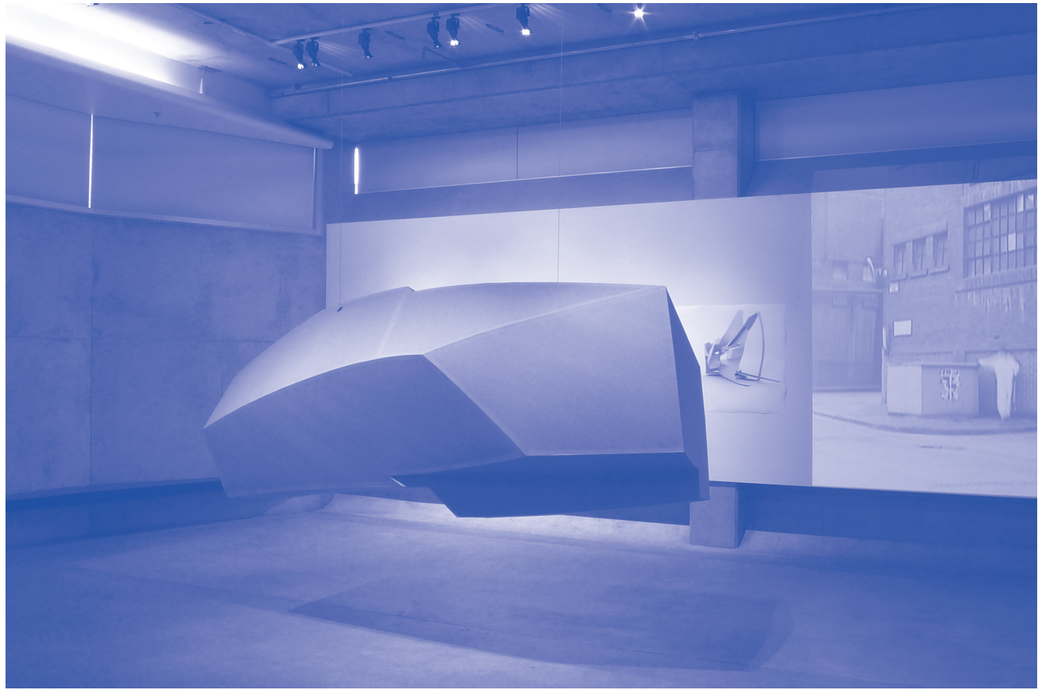
14.3 Bette/Brünner, ***Unreasonable topographies – island 3,*** digital model, Adelaide, Australia 2011

14.3

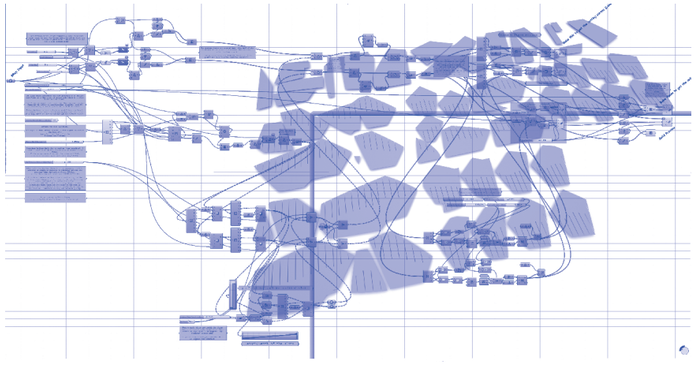
Dissection as a strategy—This appeared to be the perfect set-up to resurrect the previously created whale/character and experiment with its dissection – a strategy that I had contemplated earlier. Since I now understood that my main interest lies in the merging of 'space that is implicated in the work'[2] and 'space, which subsists as the emptiness between volumes',[3] I realised that dissecting the creature bears the potential to reinstate what I had achieved at *Uralla Court* – the flow of space between and through object and ground. In the course of later projects, the characters have become more and more enclosed, thus losing the quality of sequential space along the way. This appears to be a side effect of honing the characters in order to give them an increased presence, particularly in situations where the ground could not be touched or where a strong character was needed to give the location an identity, as was the case with *Thalia Graz*. At *Uralla Court*, the character is less defined, and the space between it and the ground more differentiated than in later projects. Space flows horizontally between the terrain and the hovering volume, yet also breaches out vertically into the character itself, where it mingles with the internal spaces. Dissecting a fully formed character could be a method to bring sequential space back into my projects, and *Spinoza's Cabinet* allowed me to explore this without constraints.

I started with transferring the object into the new location by projecting its digital origins onto a wall and tracing over them. This produced a chart, an information field, which I interpreted





14.4



14.5

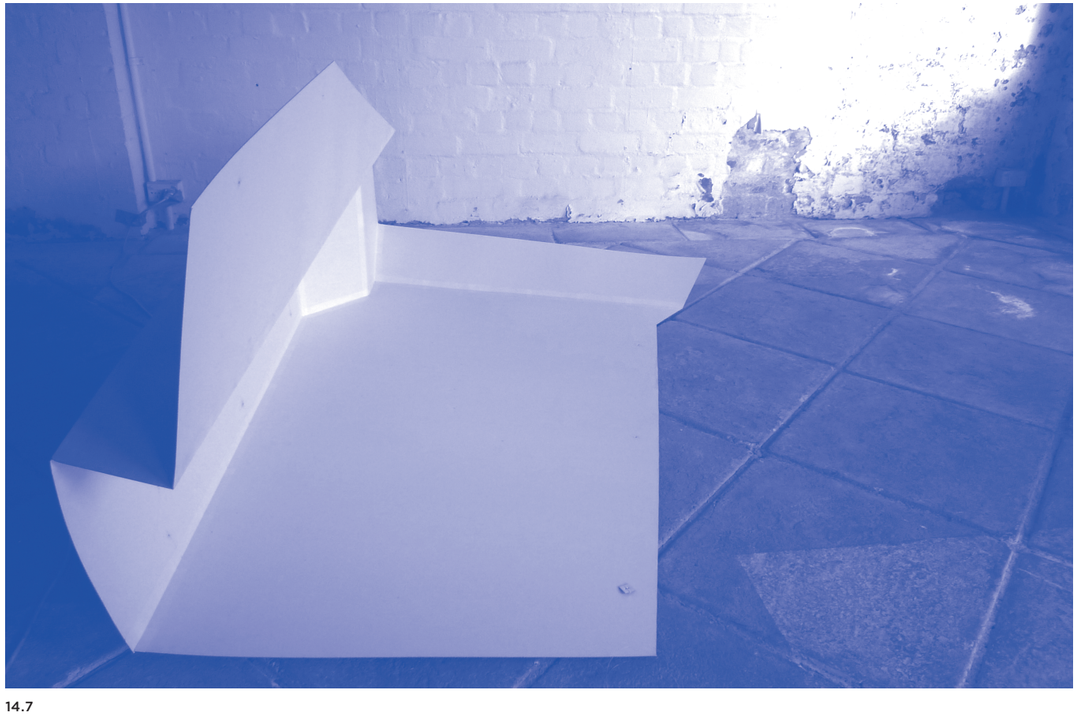
14.4 Bette/Brünner, ***Unreasonable topographies – the whale,*** installation, SASA Gallery, Adelaide, Australia 2011

14.5 Bette/Brünner, ***Unreasonable topographies*** | grasshopper script (provided by Victor Leung) adapted to create a structural waffle, Adelaide, Australia 2011

through immediate and intuitive action. The mapping of the whale became the reference point for the dissection, defining the parts that were kept intact and where the body was cut. Structural considerations played a role, as the separated pieces needed to be sufficiently rigid for handling, reassembly and suspension. To achieve this, I initially worked in a digital set-up, from where I took measures, such as the centre of gravity, which were then transferred to the physical artefacts. In conjunction with the precisely mapped ceiling joists in the exhibition space, this allowed the shells to maintain their predefined volumes without sagging onto themselves. The pieces were then tested in relation to one another and the ground by physically building and rearranging them on location.

14.6 Bette/Brünner, ***Unreasonable topographies – dissection,*** Liverpool Studios, Adelaide, Australia 2011

14.6



14.7

14.7 ***Spinoza's Cabinet*, installation |** the whale's second dissection, Adelaide, Australia 2012

The great benefit of this arrangement was being able to design and implement simultaneously. The model I worked on was already the final product, which resulted in an instantaneousness that is near impossible to achieve in architectural projects. However, working with physical models is still the best way to emulate the spatial qualities of the later project. To be 'in the model' facilitates the focus of body and mind on one thing and enables me to be fully immersed in the moment. The result of the operation was a dissected character, allowing a spatial flow that originates in the void and bridges into the body, while the character still manages to maintain a presence. Heidegger identifies three instances of space: 'The space, within which the sculptured structure can be met as an object present-at-hand [the gallery]; the space, which encloses the volume of the figure [the body of the character]; the space, which subsists as the emptiness between volumes [the void between object and ground]'.[4] The installation at *Spinoza's Cabinet* constitutes a charged situation, where these different instances of space overlay and thus amplify the quality of the project as a whole.

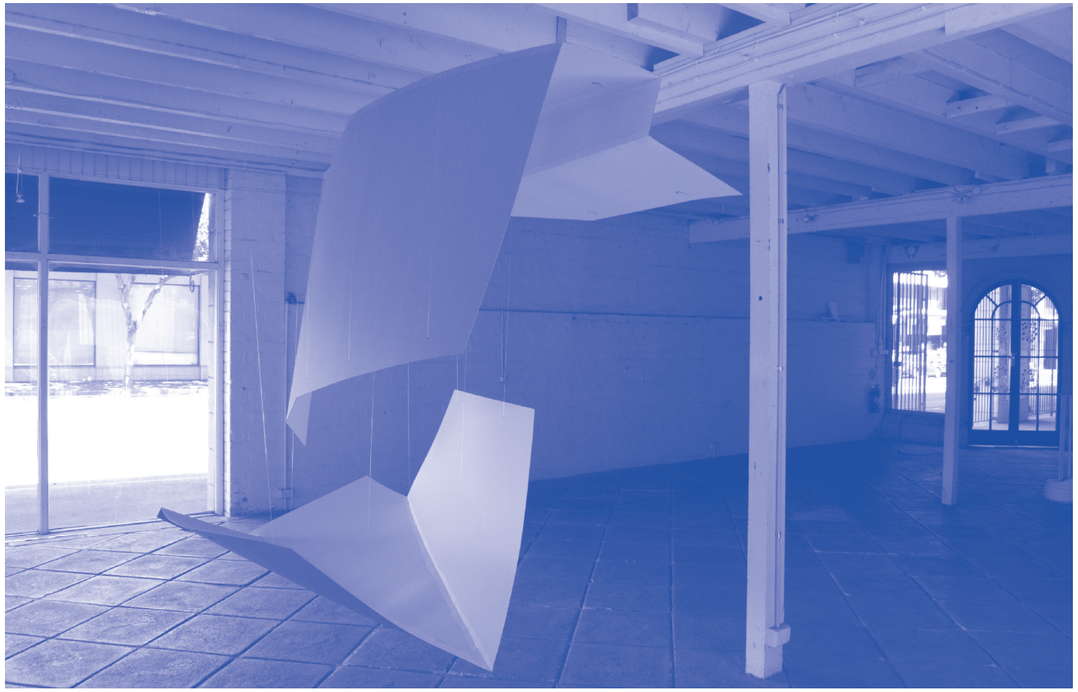
RMIT installation—*Spinoza's Cabinet* was put together with just the skin of the original whale. It framed space but did not have any volume, which was needed if I wanted to test its architectural applicability. Therefore, I tried to introduce mass with

my next installation at the RMIT Design Hub. I aimed for a large-scale installation, through which I could explain my research and have the current state of my practice condensed within it. It was fabricated from cardboard and in part suspended from the ceiling of the large project room, downstairs in the Sean Godsell building. Again, there were three agents involved – object, ground and space – plus the author balancing the choreography that was at play between them. Using the SASA gallery whale (*To the Islands)* as a point of departure, this object was expected to bring back sequential space flowing through the object while maintaining a presence as a character. At the same time it should not be read as an architectural proposition. The actual ground in the project room could not be altered. Yet, I needed a physical representation that could express the building's desires and trace the effects of the emerging dialogue between object and ground. How would the project room react to the intruder, and how would the negotiation process impact on the space between them? I brought in a surrogate ground that I had developed out of the existing grids and construction lines of the building. Initially, it was an empty canvas, which over time started to show traces of the dialogue, and then followed a process similar to the one described in *Spinoza's Cabinet*, in which the volumetric character was shaped in response to and in dialogue with its present location.

According to Stephen Neille:

'the project "speaks for itself": it embodies the argument; it expresses the argument; it creates new space; it works in dialogue with the ground to structure the "space between"; it demands a mental and bodily reaction that compels us to witness surrounding space as having been "charged" by the architectural object. The "unreasonable creature" invites us to imagine the interior space being held "within", and shifts our perception to the important role that intuitive thinking plays in the creation of architecture. What is important is the critical insight the "idea model" demonstrates as it acts to reinforce the role of the "unreasonable" in creating new and useful works, showing how new poetic works can prompt us to see the value in continuing to offer innovative spatial possibilities. Often, it is these idea models that impress themselves most deeply into the psyche and therefore help develop the imagination; they empower the intuitive faculty to act in ways that lead towards the making of unique buildings. The final project powerfully demonstrates that aesthetics do matter, and shows how architects can prioritise unreasonable processes in order to develop new phenomenal works that emanate space and demand response.'[5]

Working on installations has substantiated my design process and revealed how its expression has changed over time. My architectural characters have become more and more monolithic and hermetically closed. While they have gained 'radiant space' through their increased presence, they have lost their 'sequential space'. Closing the objects has confined space to the void underneath them, denying it the possibility to bridge the gap and branch out into the architectural character. In response to this, my aim in forthcoming work is to break up the body to reintroduce the flow of sequential space without compromising the identity of the character. *Spinoza's Cabinet* has been a first attempt in that direction. There space began to flow between segments of the object and the void beneath. The installation *Dissecting the whale* at RMIT develops this strategy further, maintaining the character's presence while succeeding in establishing spatial flows between it and the ground. Stephen Neille noted that the exhibition piece



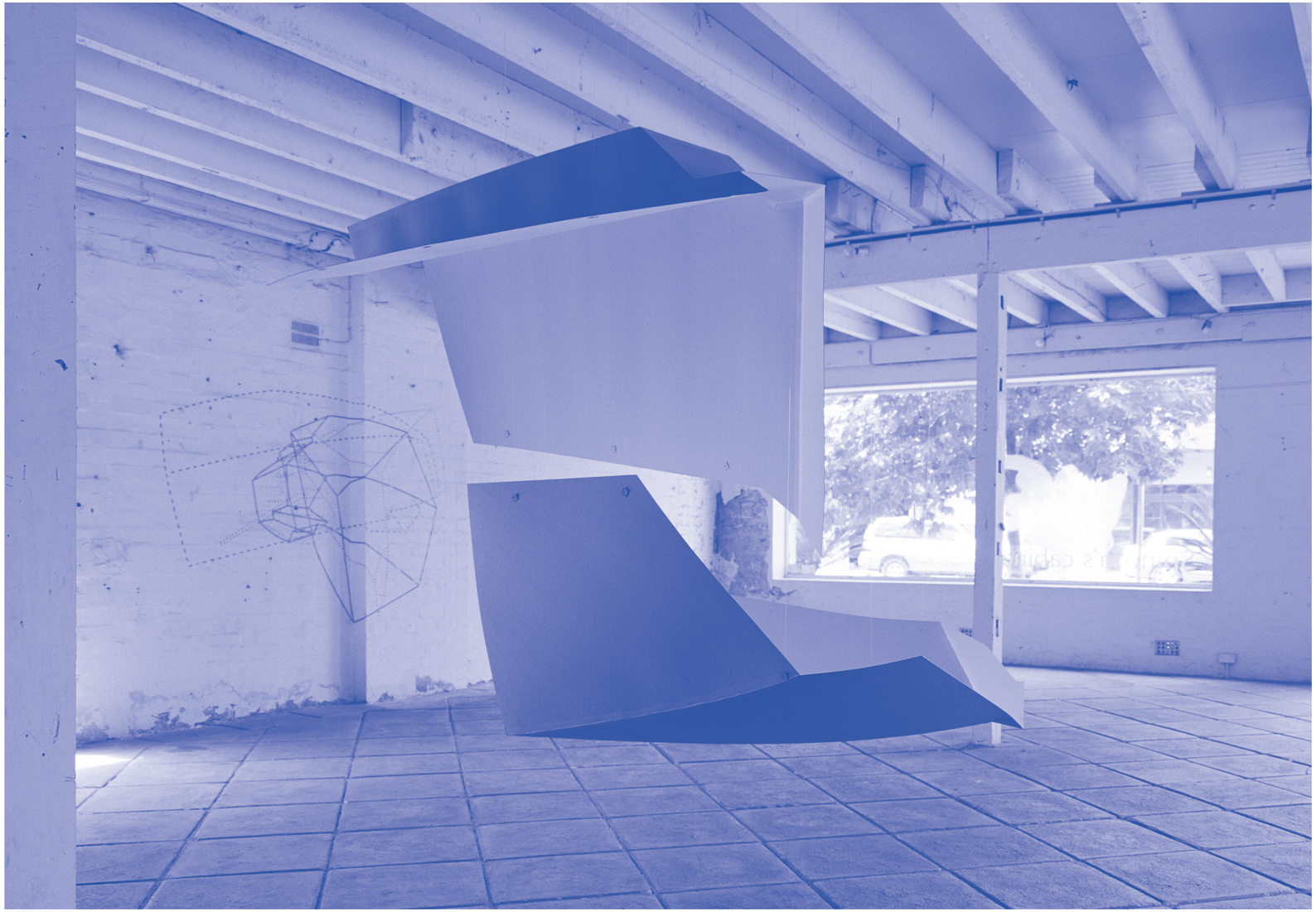
14.8

14.8 *Spinoza's Cabinet*, **installation,** Adelaide, Australia 2012

'speaks for itself', embodying the argument and charging the room with spatial energy to demonstrate what words could only promise.

Notes

1. Brünner, Margit. 'Spinoza's Cabinet', http://margitbruenner.net/terms/exhibition/#paradise-in-spinoza%e2%80%99s-cabinet-2012 (accessed 23 August 2014).
2. Chillida, *Eduardo Chillida: Writings*, 11.
3. Heidegger and Seibert, 'Art and Space', 5.
4. Heidegger and Seibert, 'Art and Space', 5.
5. Examiner's report of *Unreasonable Creatures*, PhD dissertation, November 2014.

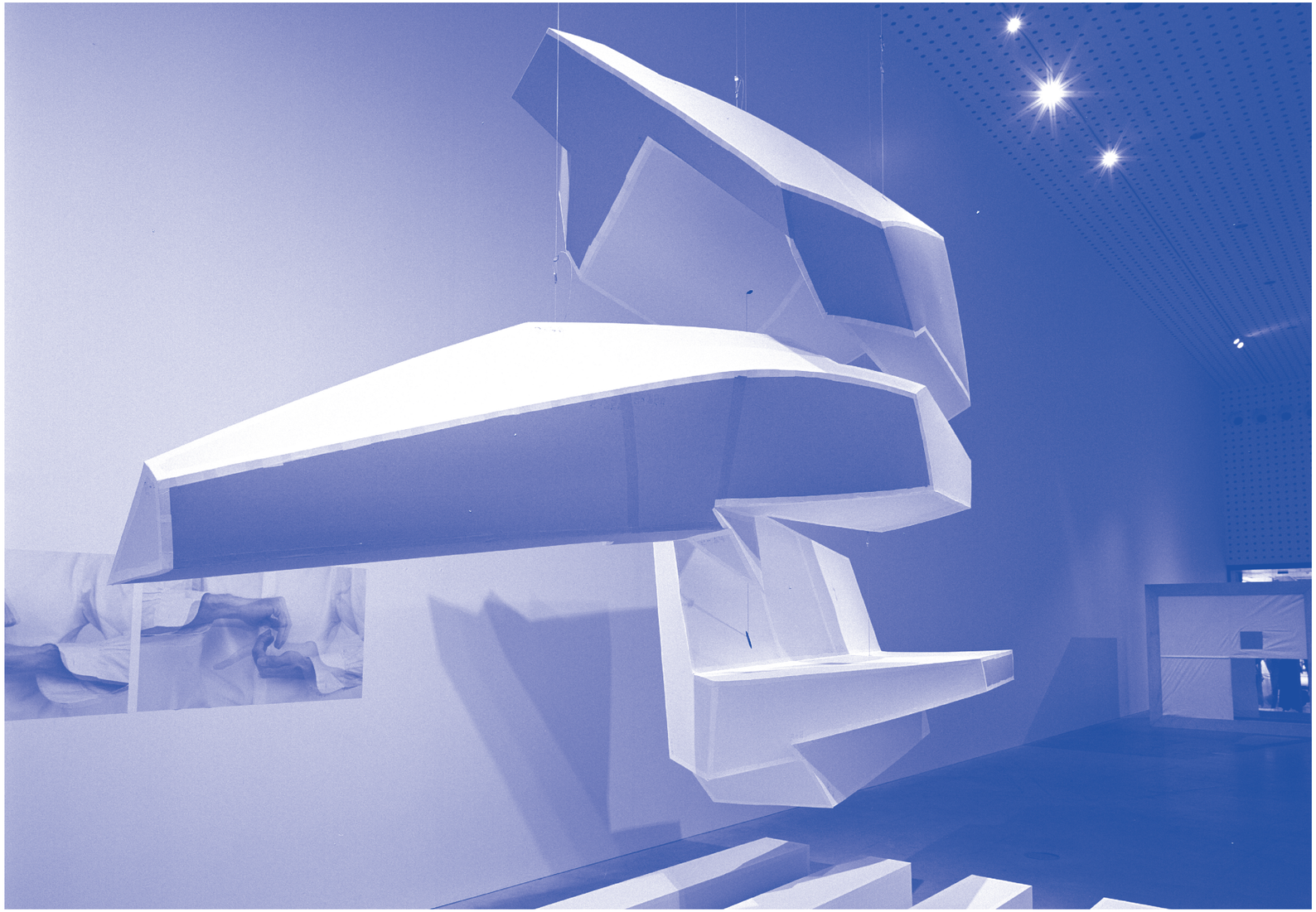


14.9

14.9 ***Spinoza's Cabinet*, installation,** Adelaide, Australia 2012

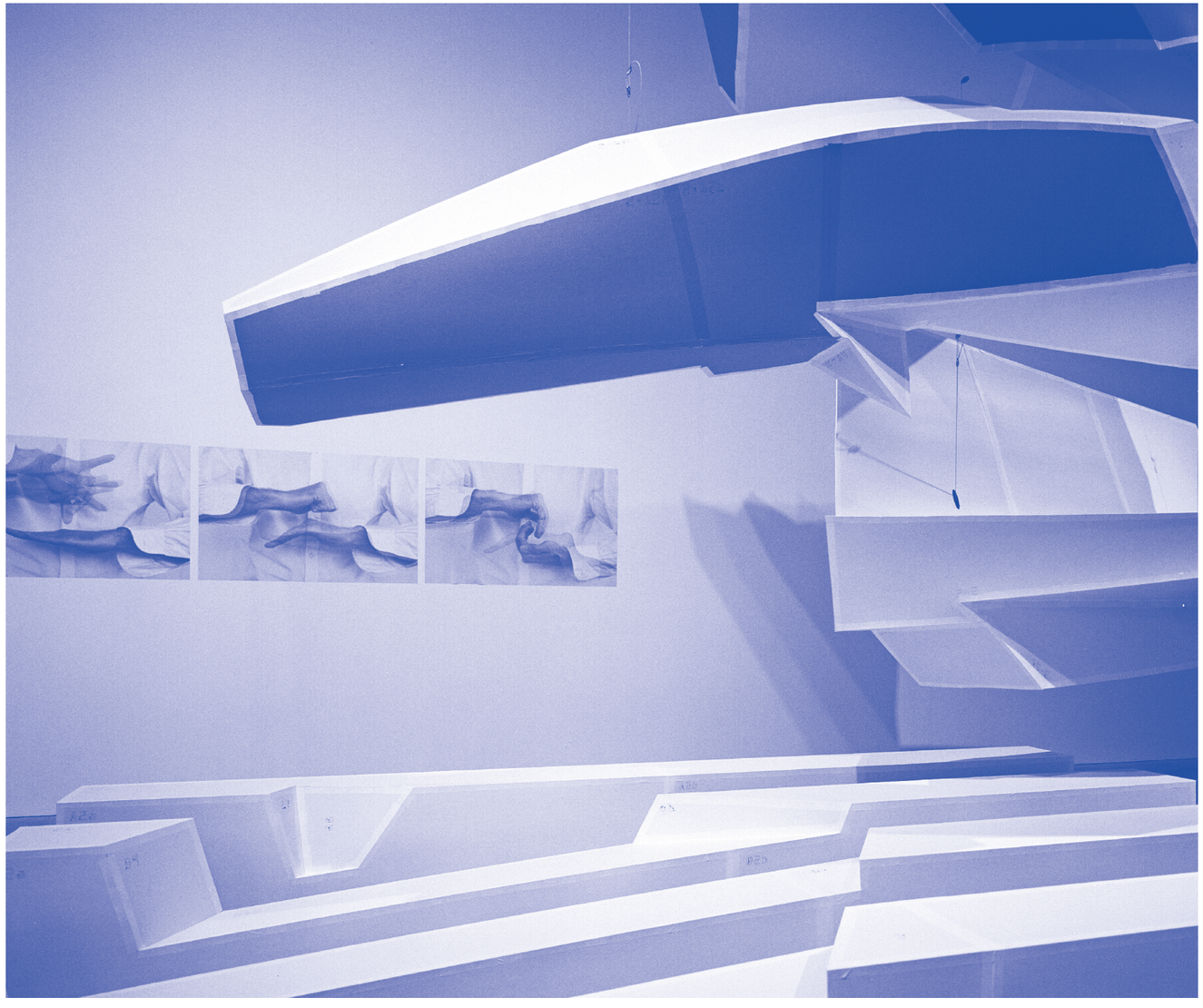
14.10 *Dissection*, installation, RMIT Design Hub, Melbourne, Australia 2014

14.10



14.11

14.11 *Dissection*, installation,
RMIT Design Hub, Melbourne,
Australia 2014



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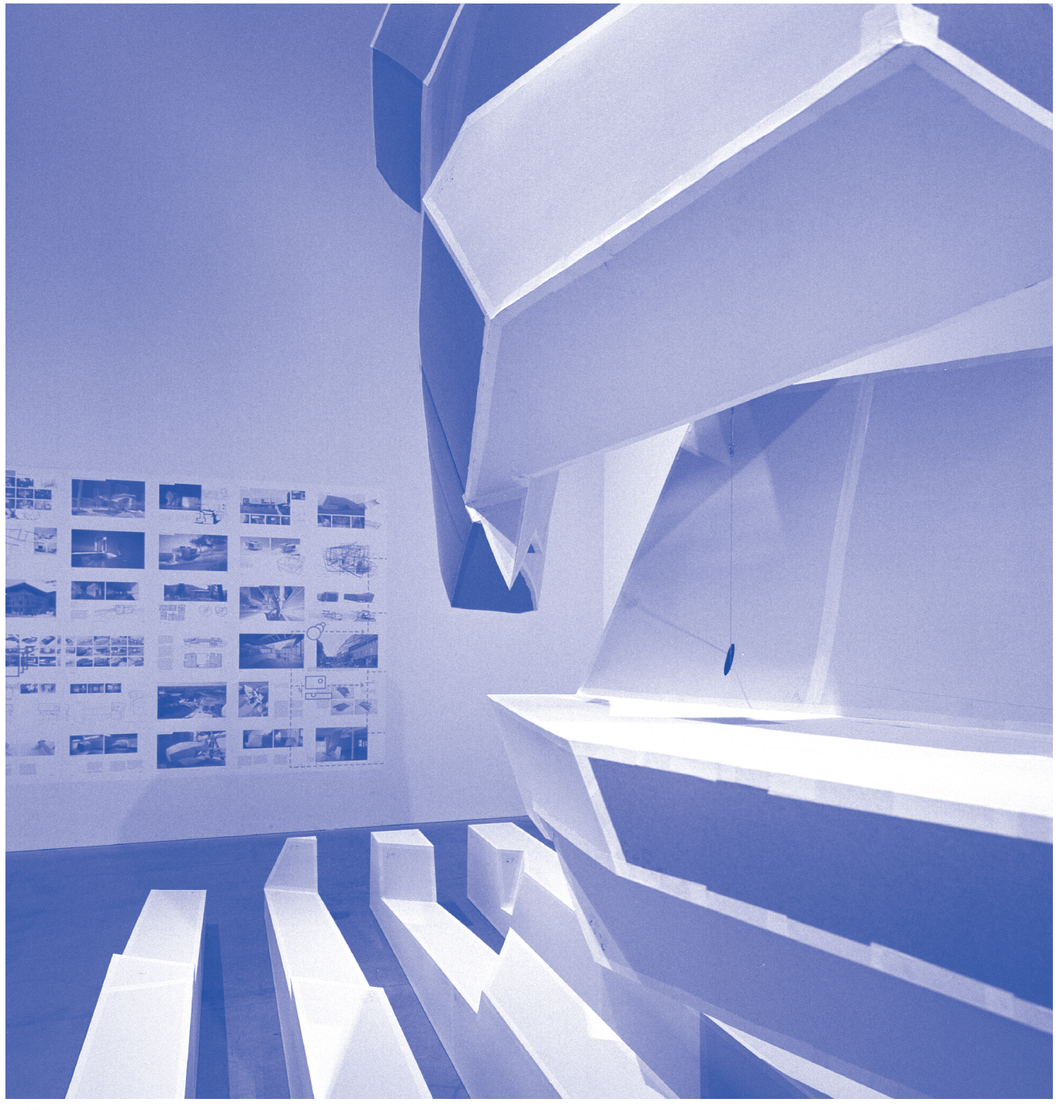

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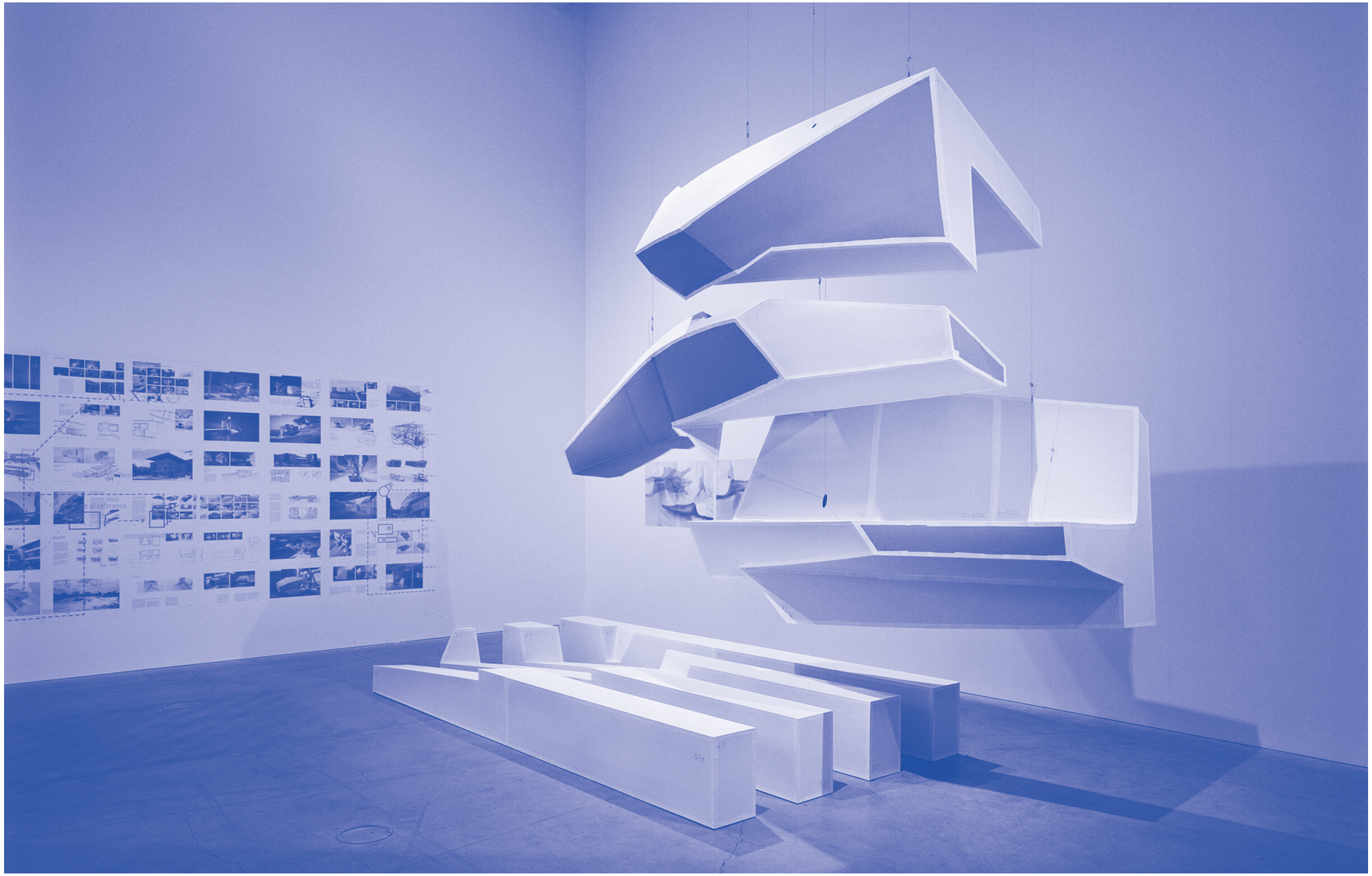

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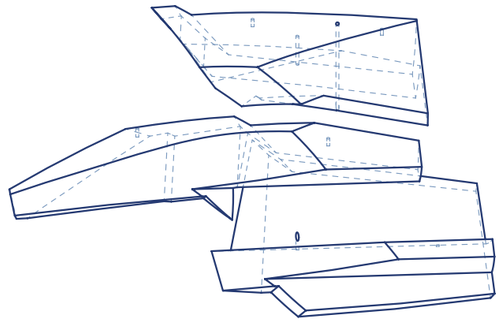


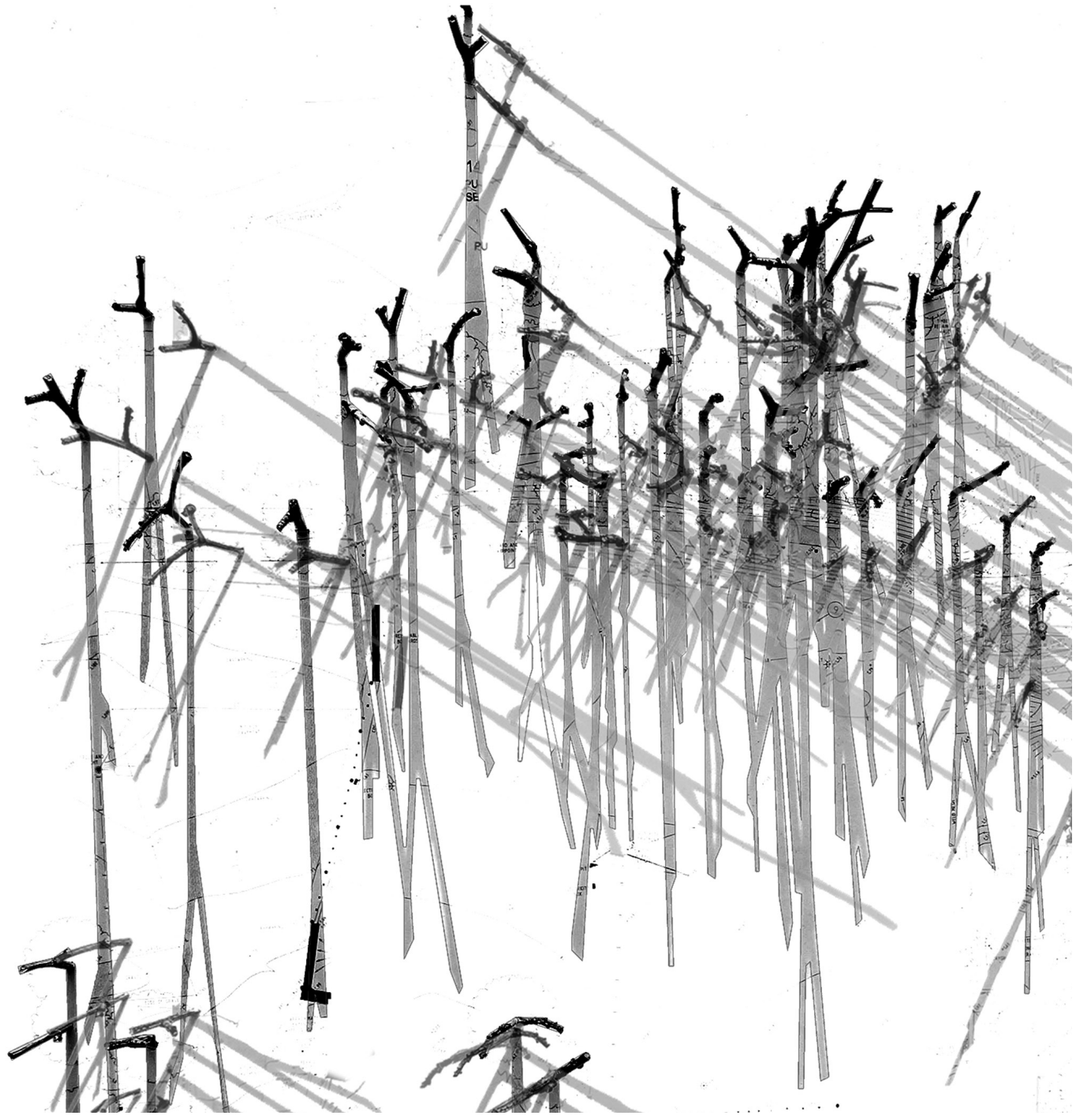
14.15

14.12 ***Dissection*****, installation,** RMIT Design Hub, Melbourne, Australia 2014

14.13 ***Dissection*****, installation,** RMIT Design Hub, Melbourne, Australia 2014

14.14 ***Dissection*****, installation,** RMIT Design Hub, Melbourne, Australia 2014

14.15 ***Dissection*****, elevation drawing,** Melbourne, Australia 2014



15.1

15.1 Minh Duc Trinh, ***Day Dreaming Experience***, **Southern Peninsula Aquatic Centre** | patterns from a sketch model, Rosebud, Australia 2014, © Minh Duc Trinh

Case study | teaching

The intention in this chapter is to establish a relationship between the overall theme of this publication, the confluence of poetic and analytical cognition, and my pedagogical approach to teaching design studios.

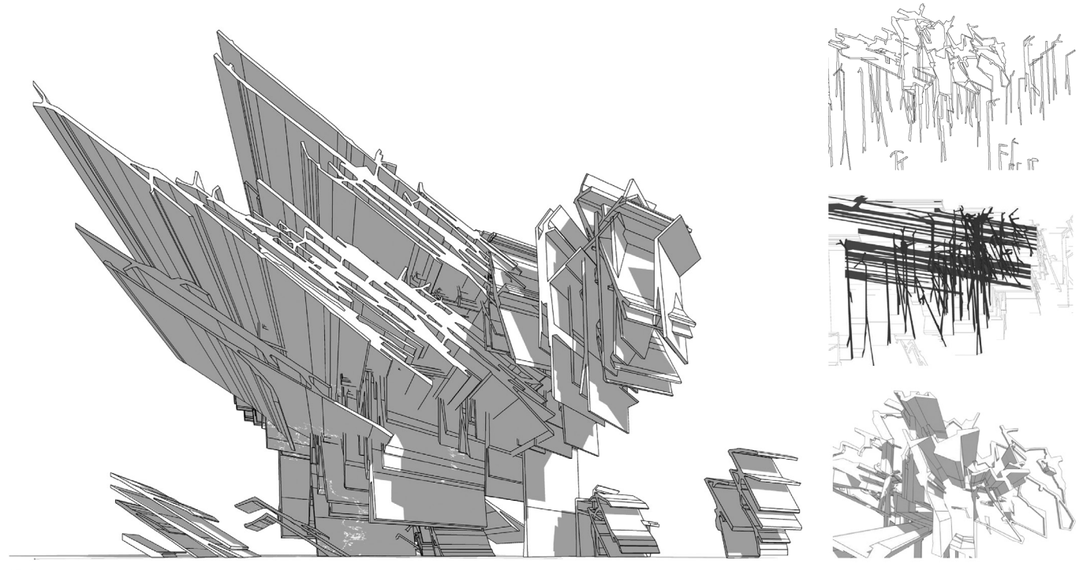
Methodology—Speculation and fiction are modes of practice-based research. Favouring hybrid processes that allow serendipitous findings to coalesce with analytical synthesis is also reflected in my teaching, where I encourage students to make use of ambiguity and indeterminacy to circumvent a biased mind and allow 'unreasonable' processes to be the key to establishing new questions and unprecedented solutions. The design studio is seen as an instrument for critically evaluating the status quo, reframing projected futures and drawing conclusions for the world we live in today. Similar to practice, my teaching revolves around a central thematic of exploration that has developed through ongoing self-reflection and the evaluation of others. Innovations develop within interstices, within the overlapping and hybridising. From there, my teaching introduces a performative approach to architectural education, in which experimental, intellectual and technical practices are developed in a series of perpetual transformations, and where accidents are valued as a key to expanding the Adjacent Possible. Each segment focuses on a specific aspect in the production of architectural character and space, forming an operational field from which the project unfurls. Accommodating uncertainty aims to unleash the power of evolutionary processes and strengthen the students' ability to evaluate and renegotiate their surroundings. Serious play and an emphasis on joy lure students beyond their comfort zone and into the world of complex architecture, deliberately concealing the final destination and releasing them into the deep end. With an attitude of informed ignorance, we claim: 'Let's be realistic and do the impossible'.[1] Make it work! The students are then aided to negotiate their way successfully back onto safe ground.

The iterative design process, where potential solutions are subjected to continuous evolutionary adaptation, allows students to understand 'design' as an evaluation practice in itself. They learn to self-evaluate their work, adapt it to changing circumstances, define and communicate its value and be resilient in the pursuit of their individual goals. These are all relevant graduate attributes for working in the creative industries, enabling students to respond successfully to

real-life problems. Yet, I do not subscribe to an architectural education that tries to emulate the professional world. 'Career-readiness' is not achieved by conveying existing modes of best practice, but rather by enabling lateral thinking, confidence, self-efficacy and a love for the discipline. I see architectural education as a laboratory in which the results are less important than 'the process of discovery. This process is not fuelled by reason but ignited by poetic impulse that connects the field of inquiry to an inner level of consciousness in which the poetic mind resides'.[2] Similar to the master-class approach in Vienna, my aim is to give students the ability to establish projects that are based on their own curiosity and line of inquiry. The teaching acts as a catalyst, offering a transformative process in which students experience, and thus understand, that their individual identities as designers are key to unlocking the joy in shaping tomorrow's worlds. Education becomes more of a performative act; ideas and strategies are developed by the student, not given by the lecturer, favouring the development of creative problem-solving techniques over the delivery of already existing content. The essence is to bring the idea of exploration to the fore, within the commitment to a defined process that lures students out of their comfort zone to encounter a world which is beyond their, sometimes very limited, immediate surrounds. Focusing on creative ideation, this essentially interdisciplinary approach aims to exceed preconceived expectations, allowing a project to arise as a critical reflection and condense concept, form and implementation in an original and coherent proposal. Students are encouraged to build upon their strengths, develop an emotional connection to the subject and start to experience design as 'serious play'.

Concrete utopias—The structure of my studios encourages students to investigate form as a start and crystallisation point for ideas. Students use process-based design methods to disassociate themselves from engrained preferences and stereotypes, and come up with structures that sit outside of existing architectural culture. Their aim is to trigger an investigation into the potential of the unknown and the 'unprecedented' to speculate on different ways of living, social interaction and building. Freeing oneself from cultural scaffolding and its reassuring guidance involves risk. In the design studio, I try to encourage risky thinking by means of expressive experimentation, subsequent analysis and invention of purpose and meaning. This, as German architect Peter Grundmann describes, may require 'wild spaces' whose performative potentials are yet unknown, spaces 'without program, without property, without rules, without function, without control, without order, without the flow of capital'.[3] These autonomous spaces, free from cultural and functional purpose, are then critically evaluated for their potential to suggest alternative forms of organisation, both socially and spatially.

Anh-Linh Ngo explains the relationship between form and innovation in his description of the installation *Incidental Space* by Christian Kerez at the 2016 Venice Architecture Biennale.[4] The work is the result of a coproduction of highly trained specialists, who joined forces in producing a space of undefined outcome. With reference to Bruno Latour, Ngo points out that Kerez's 'thing' exemplifies the autonomy of the object by distancing itself from existing references and establishing its own laws of engagement. The work was criticised for being detached from the social agendas that Alejandro Aravena's biennale, *Reporting From the Front*, was supposed to be concerned with. The opposite is the case. The lack of initial intentionality in Kerez's (and my students') work, and its resulting cultural indeterminacy, give creative agency back to the designer, who can see anew and discover the object's individual affordance. Recognisable form is always a signifier, fixated within an existing value system. Only the unrecognisable, uncoded and autonomous object enables socially divergent behaviours, and thus becomes a (safe) haven for utopian thinking and a means to widening the architectural discussion and horizon. The performative surplus embedded within formal explorations enables the students to transcend personal agendas and bridge across the borders of disciplines to propose new ways to act and live.



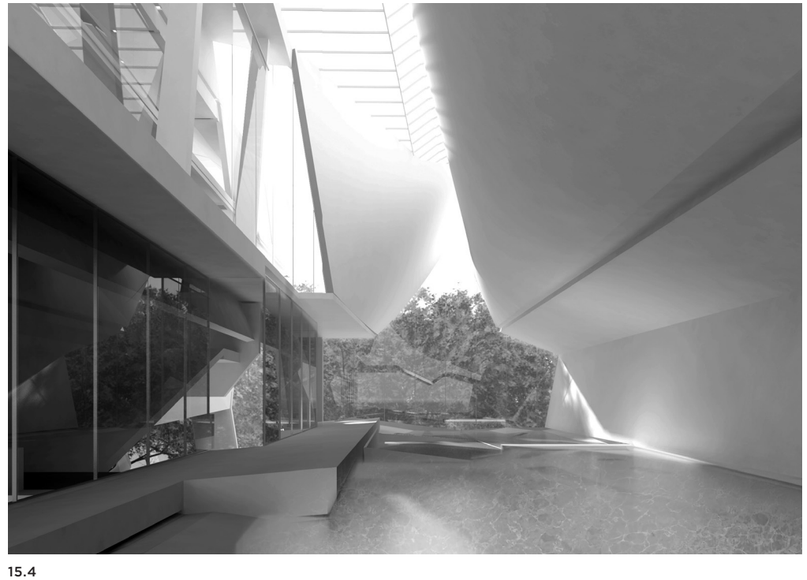
15.2

15.2 Minh Duc Trinh, *Day Dreaming Experience*, Southern Peninsula Aquatic Centre | a sculptural object is used as a catalyst for the design process, Rosebud, Australia 2014, © Minh Duc Trinh

15.3

15.3 **Minh Duc Trinh,**
***Day Dreaming Experience*,**
paper model 1:200,
Southern Peninsula
Aquatic Centre,
Rosebud, Australia 2014

The Jump Studio serves as an example for shifting students' thinking away from preconceived buildings and into methodologies for creating conceptual architecture that will eventually evolve to a built form, its resolution and presentation. With reference to Somol's analogy between Marc Angelil's design studio at the ETH and Chuck Jones's animated series *Road Runner*,[5] the studio proceeds through a series of set-ups that are designed to tune students' minds into a spatial way of thinking. The recurring tragedy of Coyote's frozen moments in space, as he loses the ground under his feet, is alternated by managing the situation with some ingenious invention that saves him from free fall. While the roadrunner only runs and beeps, the coyote constantly develops ideas and devices to rival his nemesis. He is a designer. The studio demonstrates how 'losing your foothold' can be a key factor in crafting an environment that fosters the emergence of ideas and the development of skills. As a variation of the caper film motive of having a plot go awry, students are asked to respond to ever-changing parameters, leading to unexpected situations that require immediate



15.4

15.4 **Minh Duc Trinh,**
***Day Dreaming Experience*,**
internal render,
Southern Peninsula
Aquatic Centre,
Rosebud, Australia 2014,
© Minh Duc Trinh

resolution and invention. A brief example of the Jump Studio set-up is as follows:

Week 1: observe, analyse and translate [XD > 3D] – Choose a natural process that includes movement or change. Based on the essential principles behind the studied process, build a machine that jumps. >>> abstract thinking

Week 2: an unexpected turn of events [3D > 2D] – Modify the machine so that it maps its own movement; make it draw. >>> interdisciplinary problem solving

Week 3: everything is architecture [2D > 3D] – Interpret the machine drawings as possible plans and sections, turning two-dimensional mappings turn into three-dimensional space. >>> creative imagination

Week 4: take a position [3D > XD] – Imagine your structure as a school of architecture. Define your own way of teaching and studying. Define the balance between function and poetry. >>> project alternative realities

Week 5: convince the audience [XD > 2D] – Frame the key ideas behind your

proposal and produce specifically what is needed to communicate them to a general audience. >>> communication skills

Weeks 6–12: et cetera.

I have a scholarly approach to teaching that is determined by my research into which types of environments foster the emergence of new ideas and solutions. It is driven by discovery, approached through integration and informed by application, and closely tied to all aspects of my work and extended activity. Students are not considered mute clients under instruction, but active participants contributing their own knowledge and inspiration. My approach could simply be described as advocating engagement through exploration, doing and making, pursuing the idea of the architect as innovator and inventor. Essentially, I am enabling students to establish individual research strategies within a meaningful architectural education that they feel inspired to engage with.

Different from the Institute of Architecture at the University of Valparaiso, Chile, where written poetry and physical action are equally valued, I do not engage with the written word. Instead, I try to develop the poetic out of the physical reality of tangible experiments and models. The reason for this lies in the similar methodology experienced at the Prix master-class in Vienna. On the other hand, it is also a reactive response to environments that favour a predominantly cerebral approach to design, and are equally suspicious of making as part of the thought process and form as a means of both investigation and expression. Research in the discipline lies in the doing. Yet, due to the fact that universities insist on a PhD as an entry-level qualification, the staff recruited are predominantly text-focused researchers with little design experience, doing research 'about' or 'for' design but not 'through' design. This seriously impedes the education of young architects, who, eager to shape the world they live in, are looking for role models that do just this. Shifts towards a practice-based PhD model that enables the vanguard of design practitioners to participate more actively in the academic community addresses this gap and are an important initiative to diversify the architectural and academic discourse. My aim in teaching is to show that rational parameters, such as economy, purpose and function, are all valid. However, in order for a building to become architecture, it needs to address the human desire to transcend the factual and deliver environments that spur diversity, surprise, imagination, fantasy and joy. The way in which we build reflects the spirit of our society. For students, it is vital to witness that architects not only respond to current needs and demands, but also project alternative realities and envision the world we want to live in. The resulting projects show that students are comfortable with the fact that the world constantly changes, that our environments are negotiable and that creativity is a key producer of reality.

Notes
1. 'Seamos realistas y hagamos lo imposible', Ernesto Guevara.
2. Pendleton-Jullian, *The Road That Is Not a Road*, 135.
3. Grundmann, *ARCH+ features 41*.
4. Ngo, *ARCH+* 224, 3-4.
5. Somol, 'Operation Architecture', 13.

16.1

16.1 **Process diagram |** illustrating a constructive conflict between object and ground, Melbourne, Australia 2014,
© Peter Whyte

Conclusion

Interrogating my practice has unveiled the tactics that I deploy in order to facilitate the poetics of architecture within an environment that is dominated by expectations of quantifiable performance or theory-based validation. A series of choreographed events sits at the centre of my practice. They steer a project's morphological evolution from an arbitrary input to an intrinsic figure that eventually advances towards an architectural character. This process is propelled by two modes of interrogation. One is based on emotive cognition, giving voice to the site, the architectural object and the author. The other engages in an analytic synthesis of the observed genesis, aiming to conceptualise a project by applying a frame of reference that can be shared with others. The project continuously oscillates between irrational/intuitive advancements and rational/objective steps of justification, to 'make sense' from these two different epistemological realms.

In the first instance, the unreasonable acts as a catalyst, introduced, for example, as a three-dimensional field of information, a found object, exaptation, or through the collaboration with another person to kick-start the design. Its purpose is to disassociate oneself from superficial predispositions while at the same time strengthening the position of the author, who, in the process of working through the foreign material, has to make a stand for his own position. My selection criteria here revolve around the potency of form to induce space and create emotional responses. Being driven by emotive cognition represents the second instance of 'unreasonableness' in my design process. Here, I try to develop empathy for the objects that I handle, iteratively immersing myself into each of the project's protagonists, and eventually reaching a state of self-forgetfulness where work becomes serious play. Sensing a lead for a possible solution affects me as a bodily feeling – a registration of joy that serves as a litmus test for the project's direction and eventual success.

A parallel analytic mode of assessment is concerned with testing the conceptual feasibility of a project by viewing it through the eyes of an external observer, aiming to determine purpose and meaning that are valid beyond my own personal agendas and projections. This step is pursued through the production of graphic representations, a storybook that validates a poetic proposal by arguing it through a different lens. In doing so, I transfer parameters from graphic design, film and photography into the architectural context and establish form as a signifier of meaning. I consciously

differentiate between my own interest in the project and those of other audiences, setting up a narrative along which I seek a project to be read. Alternating between two modes of assessment assists in understanding the entire ontological bandwidth of design, and coalesces personal and external agendas within a single project.

Mapping and categorising my past work has revealed a recurring choreography that employs three main agents: object, ground and space. A figure materialises from an abstract field and gradually matures to become an architectural character that emanates space. In this process, the initial excess of information is being distilled until no further simplification is possible, however, without compromising the spatial experiences or the sculptural quality of the work. My aim is to endow the object with a sense of personality, enabling an active relationship between the building and the user. I believe this makes truly sustainable architecture – unique buildings that are loved.

How to integrate the location into a design is a core question of my practice. There are many ways to 'respect' local conditions. Some believe in touching the ground lightly, others in emulating local appearances. My approach ignores the lure of nicely considered site relatedness. Instead, it relies on the seemingly brutal move of staging a confrontation between an introduced alien object and the ground. Buildings do not fly. By keeping the object in an unstable position, hovering above the ground, I create a problem that demands a resolution. My aim is to provoke a reaction from the site that, through my reading and interpretation, reveals and acknowledges the character of the location. I do this by empathetically immersing myself into both object and ground, acting as a seismograph to plot their intents. The unfolding dialogue is played out in the void between them. It marks the 'activation' of the ground and the transition of the object into an architectural character – one that has been raised by the location.

The exchange is mediated by the designer, whose own projections and interpretations become part of the negotiation process. By developing an empathy with both protagonists, their individual characteristics are voiced and translated into form. The formal negotiations refine the positions of all participating protagonists and translate directly into their heightened presence, or the energy they emanate, turning the void between them into space. It is from within the void that different forms of space emerge as a consequence of the staged antagonism between object and ground. At this stage, the design process is halted.

In the course of a project, I am handling three subjects: the architectural character, the ground and the energy that develops in the void between them. This energised void produces space – the core offering of architectural production. I have come to understand that 'activating the ground' is a means to making the site contribute to the production of architectural character and space. The path propagates the primacy of architecture-as-form over architecture-as-context and is based on the acknowledgement of emotional intelligence and irrational beginnings.

In the past, I never decided in which way it is best to talk about my work: through its phenotype (the expressed features of form), its genotype (the strategic choreography that determines its genesis) or its modes of assessment (emotive cognition and intellectual analysis). There appeared to be little acceptance for 'feeling' my way forward, assuming the liveliness of all agents involved and immersing myself into the seemingly inanimate – the architecture itself and the ground upon which it sits. Initially, the analytic mode as assessment was a means of concealing the personal motives that take place in my work. Now, operating between emotive cognition on the one side and intellectual synthesis on the other serves to acknowledge the full bandwidth of architectural ontology, from experiential and subjective values to the limits of materials, techniques and meaning.

This undecidedness led me to understand a key condition of my practice: to be in-between. Being in-between is a position that can be considered unreasonable if viewed from the vantage point of a defined body of knowledge. For me, unreasonableness implies openness and a leverage for interpretation that is missed if the operational realm is confined by logic and reason. Being unreasonable could also mean to position oneself 'between' established areas of expertise or familiarity such as the place I occupy when harnessing the two streams of education I undertook, or when working between different continents and their respective architectural and academic cultures. Unreasonableness can be found in the way that I allow intuitive synthesis and emotive cognition to guide the direction of my projects, how I misuse or co-opt features from fields unrelated to architecture, confront a site with unrelated spatial information or empathise with objects and the site. Being in-between puts the designer in the position of a 'libero',[1] a free agent, who reaches their goals by fluidly assuming different roles and positions. A prerequisite for this multivalence is the acceptance of momentary unreasonableness and illogic – or, in other words, the suspension of disbelief and the engagement in serious play.

The benefit of the unreasonable for creative practices lies in its ability to promote a state of deliberate unassured-ness that allows the designer to circumvent the often internalised and at times mandatory restrictions set up by professionalisation. Being 'between' helps in making connections across the borders of disciplines and connect seemingly unrelated material in order to spur new ideas. Here lies the basis of interdisciplinarity, the rejection of approved 'best practice' in favour of asking 'what if'. By temporarily relinquishing control – in particular at the beginning of the design processes – the rigid structure of conventional wisdom can be dissolved, allowing for new connections to be seen and formed. Working with and through indeterminate material gives creative agency back to the designer, who can see anew and discover a situation's individual affordance. By masking cultural references or the functionalist reading of modernity, the responsibility for form and space are back in the architect's hands. Neither is given by a higher order but can be worked out individually. In the process, designers

are asked to define their position within different and at times conflicting interests, including the emotional, poetic and spiritual qualities embedded in architecture.

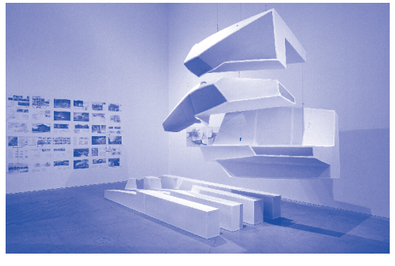
Being reasonable only gets us to where we already are. Architecture is a cultural achievement and, as such, a product of society. The acceptance of architectural form is based on being a recognisable part of an existing culture, triggering a sense of belonging and validity through reference. Hence, one could define culture as being conservative per se, as everything that is deemed culturally significant relies on matching an established canon of values, be it in regard to form or social behaviours. With this judgement comes a level of moralisation, where certain aesthetics are deemed ethically more – or less – valuable than others. Operating inside a sphere of established values is reassuring. However, to advance the discipline, we need to step outside of existing certainties and create 'a difference which makes a difference'.[2] Embracing the unreasonable is a tool to facilitate this step. It allows for other voices, other spaces – ones that we might initially suppress because they are considered to be errors. Without errors, there would be no evolution – they are intrinsic to the development of life. Likewise in design. By suppressing the 'incorrect' and not giving the unknown sufficient time or opportunity to develop its potential, we lose a vital passage to innovation.

Staging and mediating a confrontation has become my method of creating errors. It assumes and accepts the aliveness and subjectivity of all agents involved – the architectural object, the ground and the architect – giving them equal power and validity. It is between them that a dialogue unfolds that determines their performative relationship, leading to an idea and the emergence of space. We are all interested in ideas. Including other voices increases the gene pool from which an idea can stem. Acknowledging a designer's personal identity adds an idiosyncratic lens that enables seeing otherwise unrecognised potentials. While iteratively immersing oneself in different roles also facilitates the ability to pre-empt and integrate the power of the analytical, striking a balance between those aspects turns the system into a holistic entity – an ontology that the designer has both found and figured.

Notes

1. Italian for 'free'. In football, a fluid midfielder position that switches between roles in the defence and the attack.
2. Bateson, *Steps to an Ecology of Mind*, 272.

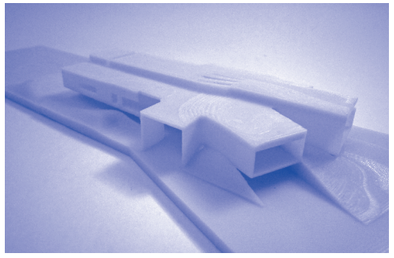
Appendix | catalogue



Dissection
Project: installation
Firm: Urs Bette
Curator: RMIT University
Role: design director
Floor Area: 30 m^2
Ground: Melbourne, Australia 2014
17.1

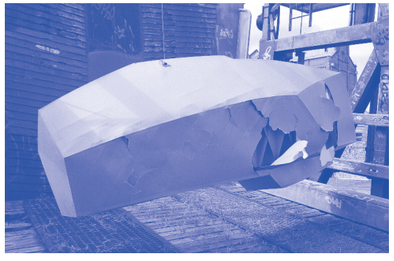
Thalia Graz
Project: offices and gym
Firm: Sam/Ott-Reinisch and Bette
Client: acoton
Role: design director
Floor Area: 3,200 m^2
Ground: Graz, Austria 2009–2014
image © Herta Hurnaus
17.2

Spinoza's cabinet
Project: installation
Firm: Urs Bette
Curator: Margit Brünner
Role: design director
Floor Area: 3 m^2
Ground: Adelaide, Australia 2012
17.3

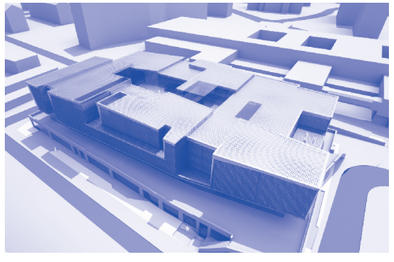


Netzwerk
Project: function venue
Firm: Bette and Ott-Reinisch
Client: Wien Energie
Role: design director
Floor Area: 1,700 m²
Ground: Erdberg, Vienna, Austria 2013
17.4

River Torrens footbridge
Project: competition
Firm: Urs Bette
Client: DPTI
Role: design director
Floor Area: 3,500 m²
Ground: Adelaide, Australia 2012
image © Daniel Kerbler
17.5

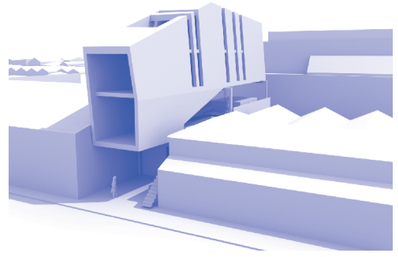


Unreasonable topographies
Project: installation
Firm: Bette and Brünner
Curators: Harvey and Pickersgill
Role: design collaborator
Floor Area: 4 m²
Ground: Adelaide, Australia 2012
17.6

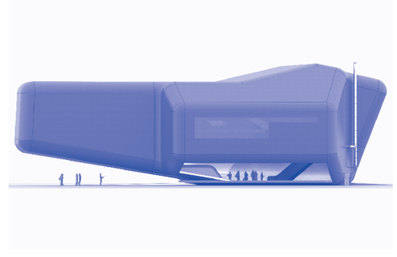


WIFI St Pölten
Project: competition – trade school
Firm: Sam/Ott-Reinisch and Bette
Client: WIFI
Role: design director
Floor Area: 8,000 m²
Ground: St Pölten, Austria 2011
17.7

EAF extension
Project: rooftop artist studio
Firm: Urs Bette
Client: Experimental Art Foundation
Role: design director
Floor Area: 50 m²
Ground: Adelaide, Australia 2009
image © Daniel Kerbler
17.8



AN house
Project: residence and studio
Firm: Urs Bette
Client: Gallagher and Hargreaves
Role: design director
Floor Area: 330 m²
Ground: Melbourne, Australia 2009
17.9



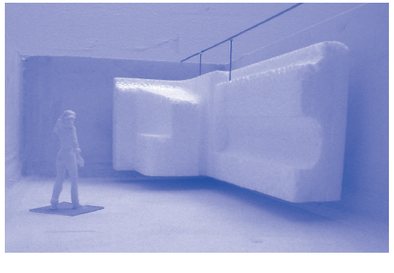
Expo Pavilion
Project: exhibition pavilion, 2008
Firm: Bette and Ott-Reinisch
Client: Wirtschaftskammer OE
Role: design director
Floor Area: 2,000 m²
Ground: Shanghai, China 2008
image © Daniel Kerbler
17.10

HTMTI Hotel
Project: training hotel
Firm: Irene Ott-Reinisch
Client: Royal Government of Bhutan and ADA
Role: design architect
Floor Area: 1,300 m²
Ground: Thimpuh, Bhutan 2005–2015
image © Irene Ott-Reinisch
17.11

Eissporthalle
Project: ice rink
Firm: Sam/Ott-Reinisch
Client: Treisma GmbH
Role: 3D modelling
Floor Area: 4,500 m²
Ground: St Pölten, Austria 2007
image © Hertha Hurnaus
17.12

Uralla Court II
Project: residence
Firm: Urs Bette
Client: Auburn and Bette
Role: design director
Floor Area: 130 m²
Ground: South Australia 2004–2006
image © Daniel Kerbler
17.13

Uralla Court
Project: residence and studio
Firm: Urs Bette
Client: Auburn and Bette
Role: design director
Floor Area: 330 m²
Ground: South Australia 2002–2004
image © Daniel Kerbler
17.14

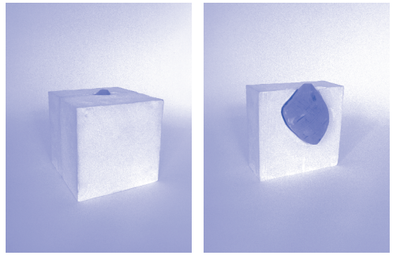


Bette Berlin
Project: gallery for contemporary jewelry
Firm: Urs Bette
Client: Gregor Bette
Role: design director
Floor Area: 50 m²
Ground: Berlin, Germany 2004
image © Daniel Kerbler
17.15

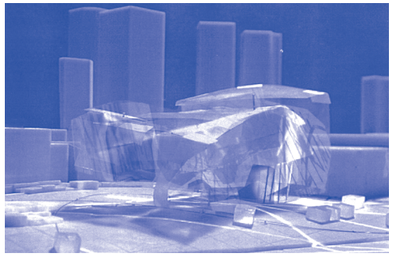
Unit Birkensee
Project: residence
Firm: Eichinger oder Knechtl
Client: Heindl and Wakolbinger
Role: design architect
Floor Area: 340 m²
Ground: Münchendorf, Austria 2003
17.16

Meinl Uhren
Project: watchmaker's shop
Firm: Eichinger oder Knechtl
Client: Johann Meindl & Co.
Role: design architect
Floor Area: 52 m²
Ground: Vienna, Austria 2002
image © Rupert Steiner
17.17

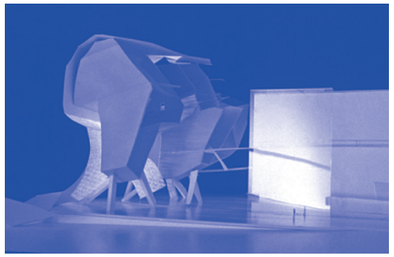
bignet
Project: Internet café
Firm: Designbureau René Chavanne
Client: big@net
Role: design architect
Floor Area: 800 m²
Ground: Vienna, Austria 2001
image © René Chavanne
17.18



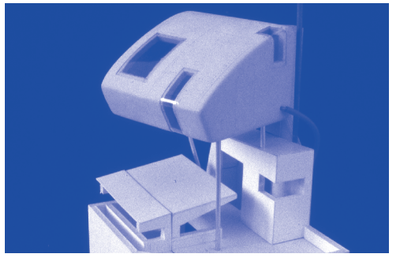
The Dragon in the Sea
Project: thesis – saving island and EEC
Firm: Urs Bette
Client: Government of Japan
Role: design director
Floor Area: 17 m²
Ground: Okinotori-shima, Japan 2000
17.19



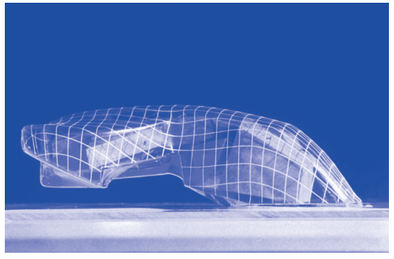
Federation Square
Project: competition
Firm: Coop Himmelb(l)au
Client: Victoria State Government and MCC
Role: part of design team
Floor Area: 38,000 m²
Ground: Melbourne, Australia 1997
image © Markus Pillhofer
17.20



Kansai-kan
Project: National Library of Japan
Firm: Coop Himmelb(l)au
Client: Japanese Ministry of Construction
Role: part of design team
Floor Area: 59,000 m²
Ground: Kansai Science City, Japan 1996
image © Markus Pillhofer
17.21



Suzuki house extension
Project: rooftop extension
Firm: Urs Bette
Client: Akira Suzuki
Role: design director
Floor Area: 12 m²
Ground: Tokyo, Japan 1995
17.22



Cloud #9
Project: UN offices and public space
Firm: Coop Himmelb(l)au
Client: United Nations
Role: part of design team
Floor Area: 60,000 m²
Ground: Geneva, Switzerland 1995
image © Markus Pillhofer
17.23

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Appendix | illustrations

Cover
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DESIGN RESEARCH IN ARCHITECTURE

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Architecture in Dialogue with an Activated Ground sets out to validate the role of the unreasonable in the design process.

Using case study projects, architect Urs Bette gives an insight into the epistemological processes of his creative practice, and unveils the strategies he deploys in order to facilitate the poetic aspects of architecture within a discourse whose evaluation parameters predominantly involve reason. Themes discussed include the emergence of space from the staged opposition between the architectural object and the site, and the relationship between emotive cognition and analytic synthesis in the design act. In both cases, there is a necessary engagement with forms of 'unreasonable' thought, action or behaviours.

By arguing for the usefulness and validity of the unreasonable in architecture, and by investigating the performative relationship between object and ground, Bette contributes to the discourse on extensions, growth and urban densification that tap into local histories and voices, including those of the seemingly inanimate – the architecture itself and the ground it sits upon – to inform the site-related production of architectural character and space. In doing so, he raises debates about the values pursued in design approval processes, and the ways in which site-relatedness is both produced and judged.

Urs Bette is Senior Lecturer at the University of Adelaide and Director of Urs Bette : Design. He holds a Masters degree in Architecture from the University of Applied Arts, Vienna, and a PhD from RMIT University Melbourne. His design works have been shown at the Architectural Biennale Venice, the AEDES Architecture Gallery Berlin and the FRAC Centre Orléans.

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